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PHILOSOPHY**

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READINGS IN TWENTIETH-CENTURY PHILOSOPHY

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Preface

The twentieth century, like most periods seen close-up, contains a bewildering philosophical diversity. In a recent anthology it is termed "the age of analysis," but this title reveals an Anglo-Saxon bias, for it is only in English-speaking countries that the various forms of analytical philosophy are dominant. The continents of Europe and Latin America are partitioned by the many varieties of phenomenology and existentialism, plus neo-Thomism. If we include pragmatism (which might conceivably be regarded as a form of analytical philosophy) we have a list of the major philosophical movements of this century. It would be difficult, if not impossible, to find a significant common denominator. The current Anglo-American tendency to take the clarification of basic concepts to be the sole legitimate province of the philosopher evokes but a faint echo from the European continent, where this is widely regarded as trivial hairsplitting. And the continental preoccupation with anxiety, death, man's encounters with nonbeing, and so forth, is likely to be stigmatized by English-speaking readers as morbid, unintelligible, and in any case not "real philosophy." England and the Continent are *incommunicado* philosophically as seldom before in history. We have not attempted to obscure the stark outlines of this opposition, or to maintain that under it lies a basic community of spirit. If any such community exists, it is not visible at this stage. We have simply tried to give generous and representative selections from both sides of this conceptual curtain, so as to enable the reader to form an adequate picture of the situation.

Not all significant and influential philosophers of the twentieth century fall into movements or schools. We have included two who defy such classification—Henri Bergson and Alfred North Whitehead. Both demand consideration for the breadth and power of their thought, and for their wide influence. But despite the fact that they have both taken from and given to the philosophical community, they stand apart from its main currents. Whitehead represents the kind of speculative philosophy that tries to integrate insights from many sources—science, art, religion, immediate experience, common sense—into a comprehensive view of reality. Since one of the few things common to almost all contemporary philosophical movements is a concern to make philosophy independent of science, as well as religion, Whitehead's enterprise is distinctly unfashionable. As for Bergson, he represents a sort of irrationalism that takes mystical intuition to be central. Today, irrationalism is popular only in the more hectic form it assumes in existentialism, which breathes a spirit quite foreign to that of Bergson.

In selecting the readings, we used two criteria. One was to include from each philosopher as long a representative sample of his work as space and other contingencies would allow. To do this, we had to limit the number of philosophers to be included. At this point, we applied our second criterion. We decided to include only (but because of space limitations not all) those philosophers who had a distinctive point of view, who had made some characteristic contribution in either philosophical method or theory or perspective. We surmised that philosophers of that description would also turn out to be influential and very much in the minds of the more promising philosophers now at work. We find that this surmise is for the most part verified. There are, as is to be expected, notable exceptions, Bergson, for instance, and perhaps Whitehead and Dewey. We included them, nevertheless, because they satisfy our second criterion. Besides, without them this anthology would have given a less balanced impression of the tenor of twentieth-century philosophy than it does. In the case of movements such as phenomenology and logical positivism we have tended to select material that embodies the initial impetus of the movement and that has been powerfully influential in its formation and dissemination. However, no selections were chosen solely for that reason. Although Husserl, Russell, and Carnap later came to modify in various ways the views presented in the selections contained here, we believe that these selections, in addition to their historical importance, contain at least as much philosophical significance and stimulation as the later works of their authors.

The introductions to each section are intended to give the reader a context in which to set the selections. They could profitably be read both before and after reading the body of the section. We have concentrated on elucidating the basic approach, concepts, and theses of the philosopher(s) in question, and on relating the various philosophers and movements to each other. Where we have ventured into criticism, it has been with a view to suggesting questions for the reader's consideration rather than to providing an adequate critical assessment, a task that would exceed the bounds that had to be imposed here. In these criticisms our own philosophical point of view reveals itself. We cannot, consistent with our philosophical convictions, apologize for this. As analytic philosophers we believe that critical analysis is of the essence of, although not the whole of, philosophy. And it is unavoidable that one's own point of view decides what is creditable and what not in another philosopher's work. We believe, however, that our judgments cannot be ultimately prejudicial to the reader's own independent response to the material. To save him there is, first, his own judgment. Second, there is the instructor, if the reader is a student; and no introduction can supplant the living teacher in dynamic interaction with his students. And last, but not least, the philosophers can speak for themselves. Theirs is the word to which the reader must turn before making his own appraisal, a task he should undertake, no matter how tentative or halting that appraisal may be.

As the contents indicates, primary responsibility for the introductions was divided between the editors, but in each case the final product is the result of mutual criticism of earlier drafts.

A survey of the contents will reveal that the volume is restricted to twentieth-century philosophy in western Europe and America. In a way this is regrettable in a world rapidly and inevitably becoming one. It would have been interesting to include samples of current philosophical thought in the Soviet Union, India, China, Japan, and so on, and we seriously considered the idea. However, in order to make Asian philosophy accessible to the Western reader, so much cultural background would have to be provided that disproportionate space would be required. As for the Soviet Union, upon investigation we discovered that there is no Soviet philosopher who fits our specifications. Since 1917, philosophers in the Soviet Union have been writing either "officially" sanctioned histories of philosophy or exegetic footnotes to Marx, Lenin, and, until recently, Stalin, all according to current standards of orthodoxy as defined by the Party.

The glaring omission in this book is Ludwig Wittgenstein (1889-1951). His influence on certain important contemporary philosophers is enormous. Wittgenstein's early and very difficult work *Tractatus Logico-Philosophicus* (1918) expounds an extreme form of logical atomism. It had a powerful influence on the early Vienna Circle. Although the *Tractatus* is still being studied, Wittgenstein himself repudiated many of its central linguistic, epistemological, and metaphysical theses in his *Philosophical Investigations*, published posthumously in 1953. In first planning this volume, we had hoped to include from the *Philosophical Investigations* Part I, pars. 1-27, 37-51, 65-71, 82-88, 109, 116, 119, 122-124, 130, 243-247, 253-274, 281-315, 316-322, 327-339, 472-485, Part II, secs. i, ii. However, our repeated pleas for permission to reprint were rejected by the publisher and the executors of Wittgenstein's estate. The introduction to the section on Ordinary Language Philosophy attempts to provide a glimpse of Wittgenstein's *Investigations* and its relation to Ordinary Language Philosophy. But, as is true of every original philosopher's work, the full flavor of Wittgenstein's philosophical investigations cannot be captured in a brief introduction. We are deeply disappointed at being prevented from providing our readers with a meaningful sample of Wittgenstein's *Philosophical Investigations*.

To each section we have appended an annotated bibliography of important books and articles. The list is by no means complete, but we hope that it will be an initial guide to those readers who may want to learn more.

This volume is designed for use in courses in twentieth-century philosophy. Normally, students enrolled in such courses would be expected to have some previous philosophical training. We believe, however, that the book will also be of use to the serious reader whose previous education has included no contact with philosophical literature. Although, in the absence

of any philosophical background, such a reader inevitably will fail to follow allusions to past philosophers and, more important, will fail to understand certain concepts and to appreciate the significance of certain issues, this will be true to a degree of any philosophical writing on which it is worthwhile spending his time. There is no one natural starting place for the study of philosophy, and a survey of twentieth-century developments is not the worst point at which to begin.

Our thanks are due to a number of colleagues. The most onerous demands were made on Professors W. D. Falk and William Hughes. This was in connection with translating the Husserl selection. We owe thanks to Professor Herbert Spiegelberg, Dr. Walter Biemel and the Husserl Archives at Louvain for further checking of our translation, and we are especially indebted to Professor Dorion Cairns, many of whose suggestions we incorporated in the final draft of our translation.

We would like to express our appreciation to the general editor of The Free Press philosophy series, Professor Paul Edwards, for his many helpful suggestions. We are also grateful, for advice and criticism, to Professors W. D. Falk, Paul Henle, William Earle, Marvin Farber, John Wild, Richard Cartwright, Hector Castaneda, Alvin Plantinga, George Kline, Norman Malcolm, Edmund Gettier, Robert Sleight, Jr., and to Professor R. M. Chisholm, who let us see, prior to publication, his introduction to *Realism and the Background of Phenomenology*, The Free Press (1960). This was of great help in writing the Husserl introduction.

We are grateful to Professor Milton Covensky of the Wayne State University History Department for help in compiling bibliographies.

We are especially indebted to Professor Carnap for suggesting numerous terminological improvements, corrections and addenda to "The Physical Language as the Universal Language of Science" and "Philosophy and Logical Syntax."

G. N.

W. P. A.

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WILLIAM JAMES

1842–1910

Introduction

William James was the eldest of five children in a remarkable family, the most famous of his siblings being Henry James, the novelist. The father, Henry James, Sr., was quite lame, and, having an independent income, devoted his time to traveling, raising his family, and thinking and writing about theologico-philosophical matters. The books that issued from the latter are long since forgotten, but the children are not. William's education and early career were rather haphazard. The family was constantly traveling; from the age of two-and-a-half until his death at sixty-eight James only once spent a period of as long as six years continuously in America. He successively set out to study painting, chemistry, and medicine, with interruptions because of back trouble and other probably psychosomatic complaints. In 1869 he was granted an M.D., but, presumably because of his delicate health, it was never supposed that he would actually practice medicine. Not until 1872, when he was made an Instructor in Physiology at Harvard, did he begin to find himself, a trend that his marriage in 1878 helped to reinforce. The marriage seems to have put an end to the various physical complaints that had largely debilitated him up to that point. Meanwhile, he began to move from physiology through psychology into philosophy. (In those days no sharp distinction was made between the latter two.) In 1876 he offered the first course in physiological psychology to be given in America, and

at the same time established the first laboratory for experimental psychology in America. In 1880 his title was changed to Assistant Professor of Philosophy, and in 1885 he became Professor of Philosophy, though it was some years before most of his lectures were devoted to what we should today call philosophy. From 1878 until 1890 he was working on his monumental *Principles of Psychology*; after 1890 (and to some extent in the late 1880's) he devoted himself to philosophy. James assembled an outstanding group in the Philosophy Department at Harvard, most notably Josiah Royce and George Santayana. The warmth of his relations with the former (despite the great differences in their thought) is well conveyed by the following excerpt from a letter written by James to Royce while on a European sojourn.

Great was my, was *our* pleasure in receiving your long and delightful letter last night. . . . I need not say, my dear old boy, how touched I am at your expressions of affection, or how it pleases me to hear that you have missed me. I too miss you profoundly. I do not find in the hotel waiters, chambermaids and bath-attendants with whom my lot is chiefly cast, that unique mixture of erudition, originality, profundity and vastness, and human wit and leisureliness, by accustoming me to which during all these years you have spoilt me for inferior kinds of intercourse. You are still the centre of my gaze, the pole of my mental magnet. When I write, 'tis with one eye on the page, and one on you. When I compose my Gifford lectures mentally, 'tis with the design exclusively of overthrowing your system, and ruining your peace. I lead a parasitic life upon you, for my highest flight of ambitious ideality is to become your conqueror, and go down into history as such, you and I rolled in one another's arms and silent (or rather loquacious still) in one last death-grapple of an embrace.¹

James has made many noteworthy contributions to philosophy, but he will undoubtedly, and deservedly, be longest remembered for his role in the emergence of pragmatism onto the philosophical scene. He is neither the founder of pragmatism (Peirce) nor the man in whom it has received its most nearly definitive presentation (Dewey), but the force of James's personality and the vigor of his pen played a great part in shaping the image of the movement and in impressing that image upon his contemporaries. Moreover, the pragmatism of James does exhibit certain distinctive features that are worthy of attention, and some characteristic strains within the movement come out in James in an instructive way—perhaps more clearly than elsewhere.

The pragmatic movement had diverse antecedents—British empiricism, evolutionary thought of the Darwinian brand, and, at least in Peirce and Dewey, Hegelian idealism—though the derivation from the last is an extremely tortuous one. The relation to traditional empiricism must occupy us a little later; for the moment we would be well advised to concentrate on Darwinism, which contains the seed of what is most distinctive in pragmatism. As is well known, Darwin profoundly influenced the thought of the late nineteenth century in every area. Perhaps the most extensive philosophical residue of this influence was the tendency to view everything, from syllogisms to society, developmentally, as a gradual unfolding from the implicit to the explicit. (Although it must be recognized that this tendency had already received a powerful impetus from the Hegelian philosophy.) Sometimes this kind of evolu-

tionary philosophy flowered into an elaborate cosmology, like that of Bergson (see pp. 52–53), with a heavy emphasis on “process” and “creativity.” James was not immune to this sort of thing. But the response to Darwin most characteristic of pragmatism is to be found in the notion of human intelligence as an adaptive instrument. According to the Darwinian theory, organisms always reproduce in greater numbers than the environment can support, and as a result those least able to get food, or to avoid becoming food, die out and fail to reproduce. Thus any organisms that we see well established in the world about us have survived at the expense of less richly endowed competitors; and one can always ask, of such an organism, “By virtue of what capacities has it been able to survive?” Now, if we look at man with questions of this sort in mind it is obvious that it is his intelligence that is chiefly responsible. It is his capacity to observe, to calculate, to envisage, to predict, to devise novel schemes that gives him his unparalleled flexibility whereby he can live, and live well, in a great diversity of circumstances. Thus, from this standpoint it is quite natural to regard human thought as having the primary function of enabling the human organism to satisfy its needs in its natural environment.

At first sight it might seem that though this way of looking at human intelligence could suggest new paths of exploration in psychology, sociology, and other sciences of man, it could hardly give rise to a philosophy. We must now see why this impression is mistaken.

It is Dewey who has most heavily and most consistently emphasized this aspect of pragmatism, and it can be seen playing a formative role in his philosophy at a great many points (see the section on Dewey). But this concept, though less prominent, is no less fundamental in James and Peirce. In their thought the idea that intelligence has an adaptive function flowers into a philosophy by way of a theory of meaning. (Peirce and James were perhaps the first to exhibit clearly the characteristically twentieth-century tendency to put considerations of meaning at the heart of philosophy.) To see this we shall have to go back for a moment to the true father of pragmatism, Charles Sanders Peirce (1839–1914).

This remarkable man, perhaps the greatest thinker yet produced by America, made distinguished contributions to logic, philosophy of science, metaphysics, epistemology, and other branches of philosophy, besides doing work in science. Paradoxically, despite strenuous efforts by James and others, for personal reasons he was unable to secure a permanent academic post. He worked for thirty years for the U.S. Geodetic Survey. In 1878 he published an article in, of all places, *The Popular Science Monthly*, entitled “How to Make Our Ideas Clear,” in the course of which he enunciated what he called “the rule for attaining the third grade of clearness of apprehension.”² In 5.392 Peirce says that logicians “are right in making familiarity with a notion the first step toward clearness of apprehension, and the definition of it the second.” But the crucial third step has been omitted, according to Peirce, and the following “rule” supplies it. “Consider what effects, that might conceivably have practical bearing, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object.”³ This principle could be put in terms of assertions as follows. To make any assertion of an object is to say that this object, when in certain circumstances or when

subjected to certain influences, will have such-and-such effects having practical bearing. And if we assume that to have a concept of, for example, a lemon is to attach a certain meaning to "lemon," or to some equivalent expression, we can then restate the principle, in more nearly contemporary terms, as having to do with the meaning of linguistic expressions, somewhat as follows. The meaning of a predicate term, *P*, is given by all those effects, which have practical bearing, that we would expect any object to have of which we predicated the term *P*. By "effects, that might conceivably have practical bearing," Peirce means effects that we might well take account of in acting toward the object with an eye to the satisfaction of our needs. Thus, to call something a lemon is to say that its pulp is nourishing, that if squeezed it will emit a sour liquid, that if put in a bag it will take up so-and-so-much room, that if placed under a heavy weight it will be mashed—these all being effects that, in one set of circumstances or another, we might well take account of in shaping our actions vis-à-vis the object.

In the same essay Peirce makes clear how this principle is derived from the Darwinian conception of the function of thought. He argues as follows. The sole function of thought is the production of belief, which in turn essentially consists of a habit of action.* Since a conception is essentially an element of thought it can refer to nothing unrelated to thought's function. Therefore the conception of any object is the conception of its effects that might conceivably have practical bearings. This whole line of argument stems from the basic assumption that the sole function of thought is the production of a habit of action.

As the title of Peirce's essay indicates, he meant this principle to be useful in clarifying our ideas, that is, in helping us to become more clearly aware of what our concepts amount to and of what we mean by the expressions we use; and also to be useful in getting rid of vague feelings that there is something to ideas other than this. As such it should have a bearing on any area of human thought. But both Peirce and James were convinced that philosophy was in much greater need of this treatment than either scientific or commonsense thought. Both were convinced that many traditional philosophical issues would either disappear or appear in a quite different light if subjected to this sort of analysis. Prior to 1878, Peirce had already suggested, in his "Review of Fraser's *Works of George Berkeley*"⁴ that there was no real difference between Berkeley's view that physical objects are simply congeries of sensory "ideas," and the more usual view that they are material substances existing independent of the mind. On the pragmatic principle, physical objects would still have exactly the same practically relevant effects in either case. Using either theory a lemon will emit a sour liquid if squeezed. But it was left to James to pursue this line more thoroughly. James was profoundly influenced by Peirce's pragmatism, which undoubtedly

* Note that a pragmatic theory of belief is essentially involved in this line of argument. To believe that lemons are sour is to possess certain habits, for example, the habit of squeezing a lemon if I want some sour, edible liquid, and so on. Unfortunately when we come to spell out the nature of these "habits" (or dispositions, to use the more common current term) we find it necessary to add a great many more conditions to each of them. In the one just mentioned, for example, we should have to add—"if there is no special reason not to choose a lemon," and even, perhaps, "if the individual in question *believes* the object to be a lemon." If it is really necessary to add conditions of this last sort, it is clear that this theory of belief is involved in circularity. This line of criticism is clearly formulated in R. M. Chisholm, *Perceiving*.⁵

fell in with existing trends in his own thinking (the mutual influence of the two men goes far back, see *Collected Papers of Charles Sanders Peirce*, 6.482). In 1898 James first used the term “pragmatism” in the essay “Philosophical Conceptions and Practical Results” reproduced below, and in 1906–1907 he gave a series of lectures at the Lowell Institute in Boston and again at Columbia University, which were then published as *Pragmatism* (1907). In this book James traces out the implications of the pragmatic principle for a wide variety of philosophical problems, such as the problem of substance in its specific forms—personal identity, God, matter; the problem of design; of free will; of monism and pluralism; the problem of truth.

The most famous application James made of the principle of pragmatism was his theory of truth. In the chapter of *Pragmatism* entitled “Pragmatism’s Conception of Truth,” James argues as follows. Philosophers dispute at length over the nature of truth. Some say it consists in correspondence between a proposition and a fact; some say it consists in the coherence that obtains between propositions or judgments. But if we consider what it means pragmatically to call a belief true, what the “cash value” of the difference between truth and falsity is, what it comes to is that the belief “works,” that is, it does the job beliefs are called upon to do in the economy of human activity. “The true is the good in the way of belief.” There is no harm in speaking of a true belief corresponding to a fact, provided we understand that what constitutes such correspondence is just this working, rather than some mirroring relation between the belief and something outside of our experience with which we can never make contact. This way of putting the matter focuses attention on the question: “What constitutes ‘working’?” “What job is a belief designed to do?” Put succinctly, James’s answer is: The function of a belief is to enable us to get about in our experience, to *lead* us from one part of experience to another. This involves enabling us to anticipate the sorts of experience we will have under certain circumstances, as well as providing general conceptual frameworks into which our experience can be organized. “Suppose me to be sitting here in my library at Cambridge, at ten minutes’ walk from Memorial Hall, and to be thinking truly of the latter object. My mind may have before it only the name, or it may have a clear image, or it may have a very dim image of the hall, but such *intrinsic* phenomena, special experiences of conjunction, are what impart to the image, be it what it may, its knowing office.

“For instance, if you ask me what hall I mean by my image, and I can tell you nothing; or if I fail to point or lead you towards the Harvard Delta; or if, being led by you, I am uncertain whether the hall I see be what I had in mind or not; you would rightly deny that I had ‘meant’ that particular hall at all, even though my mental image might to some degree have resembled it. The resemblance would count in that case as coincidental merely, for all sorts of things of a kind resemble one another in this world without being held for that reason to take cognizance of one another.

“On the other hand, if I can lead you to the hall, and tell you of its history and present uses; if in its presence I feel my idea, however imperfect it may have been, to have led hither and to be now *terminated*; if the associates of the image and of the felt hall run parallel, so that each term of the one context corresponds serially, as I walk, with an answering term of the others; why

then my soul was prophetic, and my idea must be, and by common consent would be, called cognizant of reality. That percept was what I *meant*, for into it my idea has passed by conjunctive experiences of sameness and fulfilled intention. Nowhere is there jar, but every later moment continues and corroborates an earlier one."⁶

And in "The Function of Cognition"⁷ James writes that percepts or "sensations are the mother-earth, the anchorage, the stable rock, the first and last limits, the *terminus a quo* and the *terminus ad quem* of the mind." C. I. Lewis' analysis of perceptual judgments in terms of the relations among what he calls "terminating judgments" and "non-terminating judgments" is a more rigorous formulation of this aspect of James's pragmatism.⁸ It is clear that this fits in with the pragmatic principle as set forth above. If every assertion comes down to saying what practically relevant behavior one or more objects will exhibit in certain circumstances, and if such behavior has to involve effects on our experience in order to be practically relevant, it would seem proper to test assertions primarily in terms of the extent to which they enable us to anticipate the effects objects will have on our experience and, secondarily, in terms of their success at the more abstract organization that is involved in the attempt to do this on a large scale.

It is unfortunate that James became so firmly identified with this theory of the nature of truth. James himself did nothing to discourage such an identification. He wrote widely on the topic, and he was not slow to engage in polemic with some of those, especially on the other side of the Atlantic, who responded indignantly to his formulations.⁹ The indignation can be partly traced to misunderstandings. James habitually put vivid phraseology ahead of precision, and his incautious use of phrases like "working," "cash value," "expedient," led some of his readers to understand him to be saying that no belief can be true unless it directly guides overt action (thus ruling out all thought of any considerable degree of abstraction) or that any belief is true that makes us contented or happy or that it is to our advantage in any way to believe. Views like this are, of course, rightly stigmatised as both absurd and intellectually irresponsible. Those who read James in this way were not taking seriously the things James says by way of making explicit the sort of working and the sort of expediency that are constitutive of truth (see previous paragraph); although, as we shall see shortly, there are other dimensions to James's notion of working that tend to fuzz these specifications and make it doubtful just how strictly they are to be taken.

But apart from misunderstandings there are features of James's theory of truth that might well give pause to even the most sympathetic reader. It seems clear, in retrospect, that James was seriously abusing the term "true" in identifying truth with the sort of criteria of truth he was willing to endorse. Whatever may be the correct analysis of "true," it seems clear that two persons can call a given proposition true and, at least to some extent, mean the same by what they say, while disagreeing radically over the criteria to be used for determining whether it is true. This has been put by some recent writers by saying that "true" is a term used for endorsing a proposition, signifying one's acceptance of it, and so on.¹⁰ So far as this sort of position can be made out one can distinguish truth from the criteria for truth without slipping back into the notion of an identity of structure between proposition and fact, a notion that James rightly stigmatised.

But in any event it seems clear that James's theory won't do. This conclusion is reinforced by certain implications that James drew from his theory and that scandalised many of his readers, particularly that truth changes and that truth grows. I believe that these contentions of James spring from confusions. No doubt it is sometimes true that I am eating and sometimes not true that I am eating. But that is because the sentence "I am eating" is not sufficient by itself to uniquely indicate a single proposition; hence, these words alone do not indicate anything that is capable of truth or falsity. What is true at one time is that I am eating at that time, and what is not true at another time is that I am eating at that other time; and these are not the same. I am not suggesting that it was confusions of *this* sort that led James into saying what he did. I bring in this point as a relatively simple example of the sort of confusion that is possible in this area. A consideration that did weigh heavily with James was the fact that a proposition that at one time does a good job of anticipating and organizing experience, for example, that the sun revolves around the earth, may not work so well at a later time, in the light of fuller experience. The history of science is full of such examples. But what this shows is not that truth changes; to say that in the Middle Ages it was true that the sun revolves around the earth but now it is false that the sun revolves around the earth, and really mean it, is to imply that in the Middle Ages the sun revolved around the earth but that now the sun does not revolve around the earth. What this example does show is that truth is not the same thing as working, of however intellectually respectable a type. Dewey, under the pressure of similar criticism, gave up talking of "truth" and substituted the term "warranted assertability." It now seems clear that James's main concern was, or should have been, with the conditions under which a proposition is justifiably accepted. And he might have spared the world a great deal of fruitless, though lively, controversy by simply making a present of the word "true" to his opponents.

So far James's pragmatism sounds like a fairly hard-boiled form of pragmatism, indeed, like a precursor of that most hard-boiled form, logical positivism (see pp. 385–387). It seems but a short step from the Pragmatic Principle to the Verifiability Theory of Meaning as stated by Schlick or Carnap. For if the meaning of an assertion lies in practically relevant consequences, and if the only consequences that can have practical relevance are consequences for our experience, it will follow that the significance of an assertion consists in its consequences for our experience, which is practically the Verifiability Theory. Both these positions are distinguished from the empiricist tradition of Locke and Hume in that they concentrate on empirical consequences of assertions rather than empirical origins of ideas. Pragmatism, as a form of empiricism, is itself distinguished from logical positivism in the following ways:

1. If we consider the sort of experience that is in question, we will find that the logical positivists have generally followed Locke and Hume in looking for sharply distinguishable sense data like colors, sounds, and smells, and have demanded a formulation of empirical consequences in such terms as the badge of their respectability. Whereas pragmatists have generally been much more liberal as to what is to be allowed to count as empirical consequences. More specifically, James, both in the *Psychology* and in later epistemological writings such as "Does Consciousness Exist?" and "A World of Pure Experience," ex-

plicitly disavowed Humean atomism and insisted that experience cannot adequately be envisaged as an aggregate of discrete, self-sufficient, distinguishable sensations. It was James who popularized the phrase "stream of consciousness" and who emphasized the fact that the field of awareness has an indeterminate fringe as well as a center. James argued at length that the relations connecting sensations are as primary a part of experience as the sensations themselves. Dewey also pictures experience as a much less clear-cut affair than it appears in Locke and Hume (see pp. 183-190).

2. As we have seen, Peirce and James rest their empirical theory of meaning squarely on considerations concerning man as an organism trying to get along in his natural environment. Some logical positivists attempt to give this sort of pragmatic justification of the Verifiability Theory (see Reichenbach, *Experience and Prediction*, University of Chicago Press, 1938, pp. 64-68), but more usually they have simply suggested that on reflection we can see that is what we mean by "meaning," or they have recommended it as a useful device for getting rid of insoluble problems.

However, as we have already hinted several times, there are other features of James's pragmatism that blur this strictly empiricist picture. In the opening chapter of *Pragmatism* James presents pragmatism as an agent of reconciliation between the tough minded and the tender minded, and before the book has ended it is apparent that the tough-minded position sketched above is well tempered by the tender-minded tendencies in his thought. This comes out most clearly in his treatment of religious issues. On the basis of the above presentation one would expect James to reject the question of the existence of God as meaningless, since no definite experiential expectations follow from it, or at least to make its significance hang on the provision of such consequences, as he does in *Varieties of Religious Experience*. In the postscript of that book James says:

Both instinctively and for logical reasons, I find it hard to believe that principles can exist which make no difference in facts. But all facts are particular facts, and the whole interest of the question of God's existence seems to me to lie in the consequences for particulars which that existence may be expected to entail. That no concrete particular of experience should alter its complexion in consequence of a God being there seems to me an incredible proposition. . . .¹¹

But something different happens in *Pragmatism* and in other works as well. James makes a switch, apparently without noticing it, from talking about the practically relevant consequences of the fact that so-and-so, to talking about the effects on our conduct of believing that so-and-so.* Consider: "But what does true *insofar forth* mean in this case [the case being belief in the Absolute, the God of absolute idealism]? To answer, we need only apply the pragmatic method. What do believers in the Absolute mean by saying that their belief affords them comfort?"¹² The pragmatic significance of belief in God is held to lie in such things as the greater moral vigor, or hopefulness, or sense of rationality it provides. These in turn being presumed to have various sorts of impact (largely beneficial) on conduct.

* The convenient ambiguity of the phrase "practical consequences of the belief" may have helped to mask the shift.

It is clear that if all this is allowed to count as pragmatic significance the belief in God will have pragmatic significance. And if we make a corresponding enlargement of the notion of "working," as James was all too willing to do, the belief in God can claim to be true "so far forth" as it works in these ways, that is, insofar as holding the belief does influence conduct in ways such as those just specified.

There are serious objections to this second notion of pragmatic significance. It is difficult to see how the meaning of what is believed can *consist* in consequences of what is believed. It seems clear that *what* is believed is logically prior to any consequences of believing it. Moreover, with respect to the corresponding test for truth it does seem highly irresponsible to regard a belief about the ultimate forces controlling the universe as true, on the grounds that holding the belief will increase moral vigor or charge life with a quality of hopefulness. But apart from these objections, it was unfortunate that this notion of the effects of holding a belief should be so *entangled* with the empiricist elements in James's thought. The confusion that resulted led Peirce to cry in despair that his word "pragmatism" "begins to be met with occasionally in the literary journals, where it gets abused. . . . To serve the precise purpose of expressing the original definition, he [Peirce] begs to announce the birth of the word 'pragmaticism' which is ugly enough to be safe from kidnapers."¹³

This more tender-minded side of James's pragmatism connects up with another side of James's philosophy, which might or might not be considered an aspect of pragmatism—namely, the very strong voluntaristic, anti-intellectualistic strain in James. This note was first clearly sounded, though with serious qualifications, in two essays James published in the 1880's—"The Will to Believe" and "The Sentiment of Rationality." In the former, James is concerned with issues that cannot be decided on intellectual grounds (that is, for which there is not sufficient evidence one way or the other), but which are such that the position a man takes up on the issue will have an important bearing on the conduct of his life. More specifically, James is concerned with the religious hypothesis that "First . . . the best things are the more eternal things. . . . The second affirmation of religion is that we are better off even now if we believe her first affirmation to be true."¹⁴ ("The Will to Believe," Section X, pars. 3 and 4.) He argues convincingly that a person will lead his life differently in important respects, depending on whether he adopts this hypothesis. Then, on the assumption that there is no evidence sufficient to decide the question one way or another, James contends that one has a right to take up a position on "passional grounds" (which means, roughly, as one feels inclined). In fact, says James, there is no possibility of doing otherwise; for if one tries to suspend belief, he will be acting as if the hypothesis is not true (that is, he will be conducting his life without any reference to a cosmic ruler), and so for all practical purposes he will be taking a negative position.*

This essay contains important foreshadowings of pragmatism. Note especially the way in which a pragmatic theory of belief is involved in claiming that

* The title of the essay is apt to mislead the reader into supposing that James was contending that it is possible and proper for one to take up beliefs "at will." The above summary of the argument should be sufficient to make clear that a better title for the essay would be "The Right to Believe."

agnosticism is equivalent to atheism. But the position is not identical with pragmatism. In "The Will to Believe" James has still not adopted his "tender-minded" pragmatic test of truth. He is still supposing that, however much lift we may get out of the belief in God, that is to be distinguished from establishing its truth, which would presumably have to be done in roughly the same way as that in which one would establish a scientific hypothesis. Under certain special conditions one can legitimately adopt a belief without such support, but what one is doing then is to be clearly distinguished from establishing its truth. The same distinction is even more clearly underlined in the Conclusion, Lecture XX, of *The Varieties of Religious Experience*. But with the notions of "truth" and "working" getting fogged as they do in *Pragmatism*, James ends up saying that by giving free rein to "passional considerations" of the "will to believe" sort, one could establish the truth of the religious hypothesis, in the sense of truth appropriate to it, a sense that at least belongs to the same genus as the sense in which scientific or common-sense beliefs are true and that cannot be distinguished in any sharp way from that sense. Thus, in both works we have an anti-intellectualism, an appeal to the heart and to life in the large, as against logic and scientific evidence, but with a significant difference.

In "The Sentiment of Rationality" we again get the anti-intellectualism straight, without the claim that it is practically the same thing as intellectualism. There James argues that there is a plurality of world views between which one has to choose on the basis of which one *seems* to make the most sense out of everything in one's experience. And again, at the close of his career, in *A Pluralistic Universe*, a series of Hibbert Lectures given at Oxford University in 1909, James returned to the attack on intellectualism. Here his great admiration for Bergson is most evident (see p. 55). In addition to expounding Bergson's views at some length, he maintains that "the intellect" and its logic are incapable of grasping the flow of experience. Then, building on the ideas of the great nineteenth-century psychologist-philosopher, Fechner, he produces some curious and undoubtedly nonrational speculations concerning the "compounding of consciousness"—resulting in superhuman minds such as a soul of this planet, of which our minds are parts.

We cannot hope to mention all the strands in the very complex fabric of James's philosophic thought, but at least one more deserves note. In a series of articles later collected under the title, *Essays in Radical Empiricism*, James sought to solve the traditional philosophical problems of our knowledge of the external world and the relation between mind and body in terms of a view he called "neutral monism." According to this theory there is a single world-stuff consisting of momentary experiences; these "experiences" then get organized in one way to form minds, in another way to form bodies. Thus, there is no mysterious gap between mind and matter, between knower and known. These dualities simply reflect different modes of organization of the same basic stuff. This view had little connection with pragmatism, and it has been elaborated most fully by Bertrand Russell, who is certainly no pragmatist. For further details see *The Philosophy of Logical Atomism* (see pp. 330ff.).

It seems to me that the heart of James's philosophizing lay in his irrationalism, his glorification of the heart over the head. (Some readers will find here a reflection of James's admitted incapacity to master logic.) We find this emerging

both before and after the publication of *Pragmatism*, in forms more or less related to the form it takes in the pragmatic principle. Nevertheless, it is as an early apostle of pragmatism that James made his most enduring mark on the philosophical scene.

W. P. A.

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Philosophical Conceptions and Practical Results

by **WILLIAM JAMES**

... I will seek to define with you merely what seems to be the most likely direction in which to start upon the trail of truth. Years ago this direction was given to me by an American philosopher whose home is in the East, and whose published works, few as they are and scattered in periodicals, are no fit expression of his powers. I refer to Mr. Charles S. Peirce, with whose very existence as a philosopher I dare say many of you are unacquainted. He is one of the most original of contemporary thinkers; and the principle of practicalism—or pragmatism, as he called it, when I first heard him enunciate it at Cambridge in the early '70's—is the clue or compass by following which I find myself more and more confirmed in believing we may keep our feet upon the proper trail.

Peirce's principle, as we may call it, may be expressed in a variety of ways, all of them very simple. In the *Popular Science Monthly* for January, 1878, he introduces it as follows: The soul and meaning of thought, he says, can never be made to direct itself towards anything but the production of belief, belief being the demicadence which closes a musical phrase in the symphony of our intellectual life. Thought in movement has thus for its only possible motive the attainment of thought at rest. But when our thought about an object has found its rest in belief, then our action on the subject can firmly and safely begin. Beliefs, in short, are really rules for action; and the whole function of thinking is but one step in the production of habits of action. If there were any part of a thought that made no difference in the thought's practical consequences, then that part would be no proper element of the thought's significance. Thus the same thought may be clad in different words; but if the different words suggest no different conduct, they are mere outer accretions, and have no part in the thought's meaning. If, however, they determine conduct differently, they are essential elements of the significance. "Please open the door," and, "Veuillez ouvrir la porte," in French, mean just the same thing; but "D—n you, open the door," although in

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English, *means* something very different. Thus to develop a thought's meaning we need only determine what conduct it is fitted to produce; that conduct is for us its sole significance. And the tangible fact at the root of all our thought-distinctions, however subtle, is that there is no one of them so fine as to consist in anything but a possible difference of practice. To attain perfect clearness in our thoughts of an object, then, we need only consider what effects of a conceivable practical kind the object may involve—what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects then, is for us the whole of our conception of the object, so far as that conception has positive significance at all.

This is the principle of Peirce, the principle of pragmatism. I think myself that it should be expressed more broadly than Mr. Peirce expresses it. The ultimate test for us of what a truth means is indeed the conduct it dictates or inspires. But it inspires that conduct because it first foretells some particular turn to our experience which shall call for just that conduct from us. And I should prefer for our purposes this evening to express Peirce's principle by saying that the effective meaning of any philosophic proposition can always be brought down to some particular consequence, in our future practical experience, whether active or passive; the point lying rather in the fact that the experience must be particular, than in the fact that it must be active.

To take in the importance of this principle, one must get accustomed to applying it to concrete cases. Such use as I am able to make of it convinces me that to be mindful of it in philosophical disputations tends wonderfully to smooth out misunderstandings and to bring in peace. If it did nothing else, then, it would yield a sovereignly valuable rule of method for discussion. So I shall devote the rest of this precious hour with you to its elucidation, because I sincerely think that if you once grasp it, it will shut your steps out from many an old false opening, and head you in the true direction for the trail.

One of its first consequences is this. Suppose there are two different philosophical definitions, or propositions, or maxims, or what not, which seem to contradict each other, and about which men dispute. If, by supposing the truth of the one, you can foresee no conceivable consequence to anybody at any time or place, which is different from what you would foresee if you supposed the truth of the other, why then the difference between the two propositions is no difference—it is only a specious and verbal difference, unworthy of further contention. Both formulas mean radically the same thing, although they may say it in such different words. It is astonishing to see how many philosophical disputes collapse into insignificance the moment you subject them to this simple test. There can be no difference which doesn't make a difference—no difference in abstract truth which does not express itself in a difference of concrete fact, and of conduct consequent upon the

fact, imposed on somebody, somehow, somewhere, and some-when. It is true that a certain shrinkage of values often seems to occur in our general formulas when we measure their meaning in this prosaic and practical way. They diminish. But the vastness that is merely based on vagueness is a false appearance of importance, and not a vastness worth retaining. The x's, y's and z's always do shrivel, as I have heard a learned friend say, whenever at the end of your algebraic computation they change into so many plain a's, b's and c's; but the whole function of algebra is, after all, to get them into that more definite shape; and the whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life, if this world-formula or that world-formula be the one which is true.

If we start off with an impossible case, we shall perhaps all the more clearly see the use and scope of our principle. Let us, therefore, put ourselves, in imagination, in a position from which no forecasts of consequence, no dictates of conduct, can possibly be made, so that the principle of pragmatism finds no field of application. Let us, I mean, assume that the present moment is the absolutely last moment of the world, with bare nonentity beyond it, and no hereafter for either experience or conduct.

Now I say that in that case there would be no sense whatever in some of our most urgent and envenomed philosophical and religious debates. The question, "Is matter the producer of all things or is a God there too?" would, for example, offer a perfectly idle and insignificant alternative if the world were finished and no more of it to come. Many of us, most of us, I think, now feel as if a terrible coldness and deadness would come over the world were we forced to believe that no informing spirit or purpose had to do with it, but it merely accidentally had come. The actually experienced details of fact might be the same on either hypothesis, some sad, some joyous; some rational, some odd and grotesque; but without a God behind them, we think they would have something ghastly, they would tell no genuine story, there would be no speculation in those eyes that they do glare with. With the God, on the other hand, they would grow solid, warm, and altogether full of real significance.

But I say that such an alternation of feelings, reasonable enough in a consciousness that is prospective, as ours now is, and whose world is partly yet to come, would be absolutely senseless and irrational in a purely retrospective consciousness summing up a world already past. For such a consciousness, no emotional interest could attach to the alternative. The problem would be purely intellectual; and if unaided matter could, with any scientific plausibility, be shown to cipher out the actual facts, then not the faintest shadow ought to cloud the mind of regret for the God that by the same ciphering would prove needless and disappear from our belief.

For just consider the case sincerely, and say what would be the *worth* of

such a God if he *were* there, with his work accomplished and his world run down. He would be worth no more than just that world was worth. To that amount of result, with its mixed merits and defects, his creative power could attain, but go no farther. And since there is to be no future; since the whole value and meaning of the world has been already paid in and actualized in the feelings that went with it in the passing, and now go with it in the ending; since it draws no supplemental significance (such as our real world draws) from its function of preparing something yet to come; why then, by it we take God's measure, as it were. He is the Being who could once for all do *that*; and for that much we are thankful to him, but for nothing more. But now, on the contrary hypothesis, namely, that the bits of matter following their "laws" could make that world and do no less, should we not be just as thankful to them? Wherein should we suffer loss, then, if we dropped God as an hypothesis and made the matter alone responsible? Where would the special deadness, "crassness," and ghastliness come in? And how, experience being what it is once for all, would God's presence in it make it any more "living," any richer in our sight?

Candidly, it is impossible to give any answer to this question. The actually experienced world is supposed to be the same in its details on either hypothesis, "the same, for our praise or blame," as Browning says. It stands there indefeasibly; a gift which can't be taken back. Calling matter the cause of it retracts no single one of the items that have made it up, nor does calling God the cause augment them. They are the God or the atoms, respectively, of just that and no other world. The God, if there, has been doing just what atoms could do—appearing in the character of atoms, so to speak—and earning such gratitude as is due to atoms, and no more. If his presence lends no different turn or issue to the performance, it surely can lend it no increase in dignity. Nor would indignity come to it were he absent, and did the atoms remain the only actors on the stage. When a play is once over, and the curtain down, you really make it no better by claiming an illustrious genius for its author, just as you make it no worse by calling him a common hack.

Thus if no future detail of experience or conduct is to be deduced from our hypothesis, the debate between materialism and theism becomes quite idle and insignificant. Matter and God in that event mean exactly the same thing—the power, namely, neither more nor less, that can make just this mixed, imperfect, yet completed world—and the wise man is he who in such a case would turn his back on such supererogatory discussion. Accordingly most men instinctively—and a large class of men, the so-called positivists or scientists, deliberately—do turn their backs on philosophical disputes from which nothing in the line of definite future consequences can be seen to follow. The verbal and empty character of our studies is surely a reproach with which you of the Philosophical Union are but too sadly familiar. An

escaped Berkeley student said to me at Harvard the other day—he had never been in the philosophical department here—“Words, words, words, are all that you philosophers care for.” We philosophers think it all unjust; and yet, if the principle of pragmatism be true, it is a perfectly sound reproach unless the metaphysical alternatives under investigation can be shown to have alternative practical outcomes, however delicate and distant these may be. The common man and the scientist can discover no such outcomes. And if the metaphysician can discern none either, the common man and scientist certainly are in the right of it, as against him. His science is then but pompous trifling; and the endowment of a professorship for such a being would be something really absurd.

Accordingly, in every genuine metaphysical debate some practical issue, however remote, is really involved. To realize this, revert with me to the question of materialism or theism; and place yourselves this time in the real world we live in, the world that has a future, that is yet uncompleted whilst we speak. In this unfinished world the alternative of “materialism or theism?” is intensely practical; and it is worth while for us to spend some minutes of our hour in seeing how truly this is the case.

How, indeed, does the programme differ for us, according as we consider that the facts of experience up to date are purposeless configurations of atoms moving according to eternal elementary laws, or that on the other hand they are due to the providence of God? As far as the past facts go, indeed there is no difference. These facts are in, are bagged, are captured; and the good that’s in them is gained, be the atoms or be the God their cause. There are accordingly many materialists about us today who, ignoring altogether the future and practical aspects of the question, seek to eliminate the odium attaching to the word materialism, and even to eliminate the word itself, by showing that, if matter could give birth to all these gains, why then matter, functionally considered, is just as divine an entity as God, in fact coalesces with God, is what you mean by God. Cease, these persons advise us, to use either of these terms, with their outgrown opposition. Use terms free of the clerical connotations on the one hand; of the suggestion of grossness, coarseness, ignobility, on the other. Talk of the primal mystery, of the unknowable energy, of the one and only power, instead of saying either God or matter. This is the course to which Mr. Spencer urges us at the end of the first volume of his *Psychology*. In some well-written pages he there shows us that a “matter” so infinitely subtle, and performing motions as inconceivably quick and fine as modern science postulates in her explanations, has no trace of grossness left. He shows that the conception of spirit, as we mortals hitherto have framed it, is itself too gross to cover the exquisite complexity of Nature’s facts. Both terms, he says, are but symbols, pointing to that one unknowable reality in which their oppositions cease.

Throughout these remarks of Mr. Spencer, eloquent, and even noble in

a certain sense, as they are, he seems to think that the dislike of the ordinary man to materialism comes from a purely aesthetic disdain of matter, as something gross in itself, and vile and despicable. Undoubtedly such an aesthetic disdain of matter has played a part in philosophic history. But it forms no part whatever of an intelligent modern man's dislikes. Give him a matter bound forever by its laws to lead our world nearer and nearer to perfection, and any rational man will worship that matter as readily as Mr. Spencer worships his own so-called unknowable power. It not only has made for righteousness up to date, but it will make for righteousness forever; and that is all we need. Doing practically all that a God can do, it is equivalent to God, its function is a God's function, and in a world in which a God would be superfluous; from such a world a God could never lawfully be missed.

But *is* the matter by which Mr. Spencer's process of cosmic evolution is carried on any such principle of never-ending perfection as this? Indeed it is not, for the future end of every cosmically evolved thing or system of things is tragedy; and Mr. Spencer, in confining himself to the aesthetic and ignoring the practical side of the controversy, has really contributed nothing serious to its relief. But apply now our principle of practical results, and see what a vital significance the question of materialism or theism immediately acquires.

Theism and materialism, so indifferent when taken retrospectively, point when we take them prospectively to wholly different practical consequences, to opposite outlooks of experience. For, according to the theory of mechanical evolution, the laws of redistribution of matter and motion, though they are certainly to thank for all the good hours which our organisms have ever yielded us and for all the ideals which our minds now frame, are yet fatally certain to undo their work again, and to redissolve everything that they have once evolved. You all know the picture of the last foreseeable state of the dead universe, as evolutionary science gives it forth. I cannot state it better than in Mr. Balfour's words: "The energies of our system will decay, the glory of the sun will be dimmed, and the earth, tideless and inert, will no longer tolerate the race which has for a moment disturbed its solitude. Man will go down into the pit, and all his thoughts will perish. The uneasy consciousness which in this obscure corner has for a brief space broken the contented silence of the universe, will be at rest. Matter will know itself no longer. 'Imperishable monuments' and 'immortal deeds,' death itself, and love stronger than death, will be as if they had not been. Nor will anything that is, be better or worse for all that the labor, genius, devotion, and suffering of man have striven through countless ages to effect."¹

That is the sting of it, that in the vast driftings of the cosmic weather, though many a jewelled shore appears, and many an enchanted cloud-bank

1. *The Fountains of Belief*, p. 30.

floats away, long lingering ere it be dissolved—even as our world now lingers, for our joy—yet when these transient products are gone, nothing, absolutely *nothing* remains, to represent those particular qualities, those elements of preciousness which they may have enshrined. Dead and gone are they, gone utterly from the very sphere and room of being. Without an echo; without a memory; without an influence on aught that may come after, to make it care for similar ideals. This utter final wreck and tragedy is of the essence of scientific materialism as at present understood. The lower and not the higher forces are the eternal forces, or the last surviving forces within the only cycle of evolution which we can definitely see. Mr. Spencer believes this as much as any one; so why should he argue with us as if we were making silly aesthetic objections to the “grossness” of “matter and motion,” the principles of his philosophy, when what really dismays us in it is the consolateness of its ulterior practical results?

No, the true objection to materialism is not positive but negative. It would be farcical at this day to make complaint of it for what it *is*, for “grossness.” Grossness is what grossness *does*—we now know *that*. We make complaint of it, on the contrary, for what it is *not*—not a permanent warrant for our more ideal interests, not a fulfiller of our remotest hopes.

The notion of God, on the other hand, however inferior it may be in clearness to those mathematical notions so current in mechanical philosophy, has at least this practical superiority over them, that it guarantees an ideal order that shall be permanently preserved. A world with a God in it to say the last word, may indeed burn up or freeze, but we then think of Him as still mindful of the old ideals and sure to bring them elsewhere to fruition; so that, where He is, tragedy is only provisional and partial, and shipwreck and dissolution not the absolutely final things. This need of an eternal moral order is one of the deepest needs of our breast. And those poets, like Dante and Wordsworth, who live on the conviction of such an order, owe to that fact the extraordinary tonic and consoling power of their verse. Here then, in these different emotional and practical appeals, in these adjustments of our concrete attitudes of hope and expectation, and all the delicate consequences which their differences entail, lie the real meanings of materialism and theism—not in hair-splitting abstractions about matter’s inner essence, or about the metaphysical attributes of God. Materialism means simply the denial that the moral order is eternal, and the cutting off of ultimate hopes; theism means the affirmation of an eternal moral order and the letting loose of hope. Surely here is an issue genuine enough, for any one who feels it; and, as long as men are men, it will yield matter for serious philosophic debate. Concerning this question, at any rate, the positivists and pooh-poohers of metaphysics are in the wrong.

But possibly some of you may still rally to their defence. Even whilst admitting that theism and materialism make different prophecies of the world’s future, you may yourselves pooh-pooh the difference as something

so infinitely remote as to mean nothing for a sane mind. The essence of a sane mind, you may say, is to take shorter views, and to feel no concern about such chimaeras as the latter end of the world. Well, I can only say that if you say this, you do injustice to human nature. Religious melancholy is not disposed of by a simple flourish of the word "insanity." The absolute things, the last things, the overlapping things, are the truly philosophic concern; all superior minds feel seriously about them, and the mind with the shortest views is simply the mind of the more shallow man.

However, I am willing to pass over these very distant outlooks on the ultimate, if any of you so insist. The theistic controversy can still serve to illustrate the principle of pragmatism for us well enough, without driving us so far afield. If there be a God, it is not likely that he is confined solely to making differences in the world's latter end; he probably makes differences all along its course. Now the principle of practicalism says that the very meaning of the conception of God lies in those differences which must be made in our experience if the conception be true. God's famous inventory of perfections, as elaborated by dogmatic theology, either means nothing, says our principle, or it implies certain definite things that we can feel and do at particular moments of our lives, things which we could not feel and should not do were no God present and were the business of the universe carried on by material atoms instead. So far as our conceptions of the Deity involve no such experiences, so far they are meaningless and verbal—scholastic entities and abstractions, as the positivists say, and fit objects for their scorn. But so far as they do involve such definite experiences, God means something for us, and may be real.

Now if we look at the definitions of God made by dogmatic theology, we see immediately that some stand and some fall when treated by this test. God, for example, as any orthodox text-book will tell us, is a being existing not only *per se*, or by himself, as created beings exist, but *a se*, or from himself; and out of this "aseity" flow most of his perfections. He is, for example, necessary; absolute, infinite in all respects; and single. He is simple, not compounded of essence and existence, substance and accident, actuality and potentiality, or subject and attributes, as are other things. He belongs to no genus; he is inwardly and outwardly unalterable; he knows and wills all things, and first of all his own infinite self, in one indivisible eternal act. And he is absolutely self-sufficing, and infinitely happy. Now in which one of us practical Americans here assembled does this conglomeration of attributes awaken any sense of reality? And if in no one, then why not? Surely because such attributes awaken no responsive active feelings and call for no particular conduct of our own. How does God's "aseity" come home to *you*? What specific thing can I do to adapt myself to his "simplicity"? Or how determine our behaviour henceforward if his "felicity" is anyhow absolutely complete? In the '50's and '60's Captain Mayne Reid

was the great writer of boys' books of out-of-door adventure. He was forever extolling the hunters and field-observers of living animals' habits, and keeping up a fire of invective against the "closet-naturalists," as he called them, the collectors and classifiers, and handlers of skeletons and skins. When I was a boy I used to think that a closet-naturalist must be the vilest type of wretch under the sun. But surely the systematic theologians are the closet-naturalists of the Deity, even in Captain Mayne Reid's sense. Their orthodox deduction of God's attributes is nothing but a shuffling and matching of pedantic dictionary-adjectives, aloof from morals, aloof from human needs, something that might be worked out from the mere word "God" by a logical machine of wood and brass as well as by a man of flesh and blood. The attributes which I have quoted have absolutely nothing to do with religion, for religion is a living practical affair. Other parts, indeed, of God's traditional description do have practical connection with life, and have owed all their historic importance to that fact. His omniscience, for example, and his justice. With the one he sees us in the dark, with the other he rewards and punishes what he sees. So do his ubiquity and eternity and unalterability appeal to our confidence, and his goodness banish our fears. Even attributes of less meaning to this present audience have in past times so appealed. One of the chief attributes of God, according to the orthodox theology, is his infinite love of himself, proved by asking the question, "By what but an infinite object can an infinite affection be appeased?" An immediate consequence of this primary self-love of God is the orthodox dogma that the manifestation of his own glory is God's primal purpose in creation; and that dogma has certainly made very efficient practical connection with life. It is true that we ourselves are tending to outgrow this old monarchical conception of a Deity with his "court" and pomp—"his state is kingly, thousands at his bidding speed," etc.—but there is no denying the enormous influence it had had over ecclesiastical history, nor, by repercussion, over the history of European states. And yet even these more real and significant attributes have the trail of the serpent over them as the books on theology have actually worked them out. One feels that, in the theologians' hands, they are only a set of dictionary-adjectives, mechanically deduced; logic has stepped into the place of vision, professionalism into that of life. Instead of bread we get a stone; instead of a fish, a serpent. Did such a conglomeration of abstract general terms give really the gist of our knowledge of the Deity, divinity-schools might indeed continue to flourish, but religion, vital religion, would have taken its flight from this world. What keeps religion going is something else than abstract definitions and systems of logically concatenated adjectives, and something different from faculties of theology and their professors. All these things are after-effects, secondary accretions upon a mass of concrete religious experiences, connecting themselves with feeling and conduct that renew themselves in *saecula saeculorum* in the lives of humble private men.

If you ask what these experiences are, they are conversations with the unseen, voices and visions, responses to prayer, changes of heart, deliverances from fear, inflowings of help, assurances of support, whenever certain persons set their own internal attitude in certain appropriate ways. The power comes and goes and is lost, and can be found only in a certain definite direction, just as if it were a concrete material thing. These direct experiences of a wider spiritual life with which our superficial consciousness is continuous, and with which it keeps up an intense commerce, form the primary mass of direct religious experience on which all hearsay religion rests, and which furnishes that notion of an ever-present God, out of which systematic theology thereupon proceeds to make capital in its own unreal pedantic way. What the word "God" means is just those passive and active experiences of your life. Now, my friends, it is quite immaterial to my purpose whether you yourselves enjoy and venerate these experiences, or whether you stand aloof and, viewing them in others, suspect them of being illusory and vain. Like all other human experiences, they too certainly share in the general liability to illusion and mistake. They need not be infallible. But they are certainly the originals of the God-idea, and theology is the translation; and you remember that I am now using the God-idea merely as an example, not to discuss as to its truth or error, but only to show how well the principle of pragmatism works. That the God of systematic theology should exist or not exist is a matter of small practical moment. At most it means that you may continue uttering certain abstract words and that you must stop using others. But if the God of these particular experiences be false, it is an awful thing for you, if you are one of those whose lives are stayed on such experiences. The theistic controversy, trivial enough if we take it merely academically and theologically, is of tremendous significance if we test it by its results for actual life.

I can best continue to recommend the principle of practicalism to you by keeping in the neighborhood of this theological idea. I reminded you a few minutes ago that the old monarchical notion of the Deity as a sort of Louis the Fourteenth of the Heavens is losing nowadays much of its ancient prestige. Religious philosophy, like all philosophy, is growing more and more idealistic. And in the philosophy of the Absolute, so called, that post-Kantian form of idealism which is carrying so many of our higher minds before it, we have the triumphs of what in old times was summarily disposed of as the pantheistic heresy—I mean the conception of God, not as the extraneous creator, but as the indwelling spirit and substance of the world. I know not where one can find a more candid, more clear, or, on the whole, more persuasive statement of this theology of Absolute Idealism than in the addresses made before this very Union three years ago by your own great Californian philosopher (whose colleague at Harvard I am proud to be), Josiah Royce. His contributions to the resulting volume, *The Conception of God*, form a very masterpiece of popularization. Now you will re-

member, many of you, that in the discussion that followed Professor Royce's first address, the debate turned largely on the ideas of unity and plurality, and on the question whether, if God be One in All and All in All, "One with the unity of a single instant," as Royce calls it, "forming in His wholeness one luminously transparent moment," any room is left for real morality or freedom. Professor Howison, in particular, was earnest in urging that morality and freedom are relations between a manifold of selves, and that under the regime of Royce's monistic Absolute Thought "no true manifold of selves is or can be provided for." I will not go into any of the details of that particular discussion, but just ask you to consider for a moment whether, in general, any discussion about monism or pluralism, any argument over the unity of the universe, would not necessarily be brought into a shape where it tends to straighten itself out, by bringing our principle of practical results to bear.

The question whether the world is at bottom One or Many is a typical metaphysical question. Long has it raged! In its crudest form it is an exquisite example of the *loggerheads* of metaphysics. "I say it is one great fact," Parmenides and Spinoza exclaim. "I say it is many little facts," reply the atomists and associationists. "I say it is both one and many, many in one," say the Hegelians; and in the ordinary popular discussions we rarely get beyond this barren reiteration by the disputants of their pet adjectives of number. But is it not first of all clear that when we take such an adjective as "One" absolutely and abstractly, its meaning is so vague and empty that it makes no difference whether we affirm or deny it? Certainly this universe is not the mere number One; and yet you can number it "one," if you like, in talking about it as contrasted with other possible worlds numbered "two" and "three" for the occasion. What exact thing do you *practically* mean by "One," when you call the universe One, is the first question you must ask. In what ways does the oneness come home to your own personal life? By what difference does it express itself in your experience? How can you act differently towards a universe which is one? Inquired into in this way, the unity might grow clear and be affirmed in some ways and denied in others, and so cleared up, even though a certain vague and worshipful portentousness might disappear from the notion of it in the process.

For instance, one practical result that follows when we have one thing to handle, is that we can pass from one part of it to another without letting go of the thing. In this sense oneness must be partly denied and partly affirmed of our universe. Physically we can pass continuously in various manners from one part of it to another part. But logically and psychically the passage seems less easy, for there is no obvious transition from one mind to another, or from minds to physical things. You have to step off and get on again; so that in these ways the world is not one, as measured by that practical test.

Another practical meaning of oneness is susceptibility of collection. A collection is one, though the things that compose it be many. Now, can we

practically "collect" the universe? Physically, of course we cannot. And mentally we cannot, if we take it correctly in its details. But if we take it summarily and abstractly, then we collect it mentally whenever we refer to it, even as I do now when I fling the term "universe" at it, and so seem to leave a mental ring around it. It is plain, however, that such abstract noetic unity (as one might call it) is practically an extremely insignificant thing.

Again, oneness may mean generic sameness, so that you can treat all parts of the collection by one rule and get the same results. It is evident that in this sense the oneness of our world is incomplete, for in spite of much generic sameness in its elements and items, they still remain of many irreducible kinds. You can't pass by mere logic all over the field of it.

Its elements have, however, an affinity or commensurability with each other, are not wholly irrelevant, but can be compared, and fit together after certain fashions. This again might practically mean that they were one in origin, and that, tracing them backwards, we should find them arising in a single primal causal fact. Such unity of origin would have definite practical consequences, would have them for our scientific life at least.

I can give only these hasty superficial indications of what I mean when I say that it tends to clear up the quarrel between monism and pluralism to subject the notion of unity to such practical tests. On the other hand, it does but perpetuate strife and misunderstanding to continue talking of it in an absolute and mystical way. I have little doubt myself that this old quarrel might be completely smoothed out to the satisfaction of all claimants, if only the maxim of Peirce were methodically followed here. The current monism on the whole still keeps talking in too abstract a way. It says the world must be either pure disconnectedness, no universe at all, or absolute unity. It insists that there is no stopping-place half way. Any connection whatever, says this monism, is only possible if there be still more connection, until at last we are driven to admit the absolutely total connection required. But this absolutely total connection either means nothing, is the mere word "one" spelt long; or else it means the sum of all the partial connections that can possibly be conceived. I believe that when we thus attack the question, and set ourselves to search for these possible connections, and conceive each in a definite practical way, the dispute is already in a fair way to be settled beyond the chance of misunderstanding, by a compromise in which the Many and the One both get their lawful rights.

But I am in danger of becoming technical; so I must stop right here, and let you go.

I am happy to say that it is the English-speaking philosophers who first introduced the custom of interpreting the meaning of conceptions by asking what difference they make for life. Mr. Peirce has only expressed in the form of an explicit maxim what their sense for reality led them all instinctively to do. The great English way of investigating a conception is to ask yourself right off, "What is it *known as*? In what facts does it result? What is

its *cash-value*, in terms of particular experience? and what special difference would come into the world according as it were true or false?" Thus does Locke treat the conception of personal identity. What you mean by it is just your chain of memories, says he. That is the only concretely verifiable part of its significance. All further ideas about it, such as the oneness of manyness of the spiritual substance on which it is based, are therefore void of intelligible meaning; and propositions touching such ideas may be indifferently affirmed or denied. So Berkeley with his "matter." The cash-value of matter is our physical sensations. That is what it is known as, all that we concretely verify of its conception. That therefore is the whole meaning of the word "matter"—any other pretended meaning is mere wind of words. Hume does the same thing with causation. It is known as habitual antecedence, and tendency on our part to look for something definite to come. Apart from this practical meaning it has no significance whatever, and books about it may be committed to the flames, says Hume. Stewart and Brown, James Mill, John Mill, and Bain, have followed more or less consistently the same method; and Shadworth Hodgson has used it almost as explicitly as Mr. Peirce. These writers have many of them no doubt been too sweeping in their negations; Hume, in particular, and James Mill, and Bain. But when all is said and done, it was they, not Kant, who introduced "the critical method" into philosophy, the one method fitted to make philosophy a study worthy of serious men. For what seriousness can possibly remain in debating philosophic propositions that will never make an appreciable difference to us in action? And what matters it, when all propositions are practically meaningless, which of them be called true or false?

The shortcomings and the negations and baldnesses of the English philosophers in question come, not from their eye to merely practical results, but solely from their failure to track the practical results completely enough to see how far they extend. Hume can be corrected and built out, and his beliefs enriched, by using Humean principles exclusively, and without making any use of the circuitous and ponderous artificialities of Kant. It is indeed a somewhat pathetic matter, as it seems to me, that this is not the course which the actual history of philosophy has followed. Hume had no English successors of adequate ability to complete him and correct his negations; so it happened, as a matter of fact, that the building out of critical philosophy has mainly been left to thinkers who were under the influence of Kant. Even in England and this country it is with Kantian catch-words and categories that the fuller view of life is pursued, and in our universities it is the courses in transcendentalism that kindle the enthusiasm of the more ardent students, whilst the courses in English philosophy are committed to a secondary place. I cannot think that this is exactly as it should be. And I say this not out of national jingoism, for jingoism has no place in philosophy; or not of excitement over the great Anglo-American alliance against the world, of which we nowadays hear so much—though

heaven knows that to that alliance I wish a God-speed. I say it because I sincerely believe that the English spirit in philosophy is intellectually, as well as practically and morally, on the saner, sounder, and truer path. Kant's mind is the rarest and most intricate of all possible antique bric-a-brac museums, and connoisseurs and dilettanti will always wish to visit it and see the wondrous and racy contents. The temper of the dear old man about his work is perfectly delectable. And yet he is really—although I shrink with some terror from saying such a thing before some of you here present—at bottom a mere curio, a “specimen.” I mean by this a perfectly definite thing: I believe that Kant bequeaths to us not one single conception which is both indispensable to philosophy and which philosophy either did not possess before him, or was not destined inevitably to acquire after him through the growth of men's reflection upon the hypotheses by which science interprets nature. The true line of philosophic progress lies, in short, it seems to me, not so much *through* Kant as *round* him to the point where now we stand. Philosophy can perfectly well outflank him, and build herself up into adequate fulness by prolonging more directly the older English lines.

May I hope, as I now conclude, and release your attention from the strain to which you have so kindly put it on my behalf, that on this wonderful Pacific Coast, of which our race is taking possession, the principle of practicalism, in which I have tried so hard to interest you, and with it the whole English tradition in philosophy, will come to its rights, and in your hands help the rest of us in our struggle towards the light.

The Moral Philosopher and the Moral Life¹

by **WILLIAM JAMES**

The main purpose of this paper is to show that there is no such thing possible as an ethical philosophy dogmatically made up in advance. We all help to determine the content of ethical philosophy so far as we contrib-

1. An Address to the Yale Philosophical Club, published in the *International Journal of Ethics*, April, 1891.

ute to the race's moral life. In other words, there can be no final truth in ethics any more than in physics, until the last man has had his experience and said his say. In the one case as in the other, however, the hypotheses which we now make while waiting, and the acts to which they prompt us, are among the indispensable conditions which determine what that "say" shall be.

First of all, what is the position of him who seeks an ethical philosophy? To begin with, he must be distinguished from all those who are satisfied to be ethical sceptics. He *will* not be a sceptic; therefore so far from ethical scepticism being one possible fruit of ethical philosophizing, it can only be regarded as that residual alternative to all philosophy which from the outset menaces every would-be philosopher who may give up the quest discouraged, and renounce his original aim. That aim is to find an account of the moral relations that obtain among things, which will weave them into the unity of a stable system, and make of the world what one may call a genuine universe from the ethical point of view. So far as the world resists reduction to the form of unity, so far as ethical propositions seem unstable, so far does the philosopher fail of his ideal. The subject-matter of his study is the ideals he finds existing in the world; the purpose which guides him is this ideal of his own, of getting them into a certain form. This ideal is thus a factor in ethical philosophy whose legitimate presence must never be overlooked; it is a positive contribution which the philosopher himself necessarily makes to the problem. But it is his only positive contribution. At the outset of his inquiry he ought to have no other ideals. Were he interested peculiarly in the triumph of any one kind of good, he would *pro tanto* cease to be a judicial investigator, and become an advocate for some limited element of the case.

There are three questions in ethics which must be kept apart. Let them be called respectively the *psychological* question, the *metaphysical* question, and the *casuistic* question. The psychological question asks after the historical *origin* of our moral ideas and judgments; the metaphysical question asks what the very *meaning* of the words "good," "ill," and "obligation" are; the casuistic question asks what is the *measure* of the various goods and ills which men recognize, so that the philosopher may settle the true order of human obligations.

I

The psychological question is for most disputants the only question. When your ordinary doctor of divinity has proved to his own satisfaction that an altogether unique faculty called "conscience" must be postulated to tell us what is right and what is wrong; or when your popular-science en-

thusiast has proclaimed that "apriorism" is an exploded superstition, and that our moral judgments have gradually resulted from the teaching of the environment, each of these persons thinks that ethics is settled and nothing more is to be said. The familiar pair of names, *Intuitionist* and *Evolutionist*, so commonly used now to connote all possible differences in ethical opinion, really refer to the psychological question alone. The discussion of this question hinges so much upon particular details that it is impossible to enter upon it at all within the limits of this paper. I will therefore only express dogmatically my own belief, which is this—that the Bentham, the Mills, and the Bains have done a lasting service in taking so many of our human ideals and showing how they must have arisen from the association with acts of simple bodily pleasures and reliefs from pain. Association with many remote pleasures will unquestionably make a thing significant of goodness in our minds; and the more vaguely the goodness is conceived of, the more mysterious will its source appear to be. But it is surely impossible to explain all our sentiments and preferences in this simple way. The more minutely psychology studies human nature, the more clearly it finds there traces of secondary affections, relating the impressions of the environment with one another and with our impulses in quite different ways from those mere associations of coexistence and succession which are practically all that pure empiricism can admit. Take the love of drunkenness; take bashfulness, the terror of high places, the tendency to seasickness, to faint at the sight of blood, the susceptibility to musical sounds; take the emotion of the comical, the passion for poetry, for mathematics, or for metaphysics—no one of these things can be wholly explained by either association or utility. They *go with* other things that can be so explained, no doubt; and some of them are prophetic of future utilities, since there is nothing in us for which some use may not be found. But their origin is in incidental complications to our cerebral structure, a structure whose original features arose with no reference to the perception of such discords and harmonies as these.

Well, a vast number of our moral perceptions also are certainly of this secondary and brain-born kind. They deal with directly felt fitnesses between things, and often fly in the teeth of all the prepossessions of habit and presumptions of utility. The moment you get beyond the coarser and more commonplace moral maxims, the Decalogues and Poor Richard's Almanacs, you fall into schemes and positions which to the eye of common-sense are fantastic and over-strained. The sense for abstract justice which some persons have is as eccentric a variation, from the natural-history point of view, as is the passion for music or for the higher philosophical consistencies which consumes the soul of others. The feeling of the inward dignity of certain spiritual attitudes, as peace, serenity, simplicity, veracity; and of the essential vulgarity of others, as querulousness, anxiety, egoistic fussiness, etc.—are quite inexplicable except by an innate preference of the more ideal attitude for its own pure sake. The nobler thing *tastes* better, and that is all that we can say. "Experience" of consequences may truly teach us what

things are *wicked*, but what have consequences to do with what is *mean* and *vulgar*? If a man has shot his wife's paramour, by reason of what subtle repugnancy to things is it that we are so disgusted when we hear that the wife and the husband have made it up and are living comfortably together again? Or if the hypothesis were offered us of a world in which Messrs. Fourier's and Bellamy's and Morris's utopias should all be outdone, and millions kept permanently happy on the one simple condition that a certain lost soul on the far-off edge of things should live a life of lonely torture, what except a specified and independent sort of emotion can it be which would make us immediately feel, even though an impulse arose within us to clutch at the happiness so offered, how hideous a thing would be its enjoyment when deliberately accepted as the fruit of such a bargain? To what, once more, but subtle brainborn feelings of discord can be due all these recent protests against the entire race-tradition of retributive justice?—I refer to Tolstoi with his ideas of non-resistance, to Mr. Bellamy with his substitution of oblivion for repentance (in his novel of Dr. Haidenchain's Process), to Mr. Guyau with his radical condemnation of the punitive ideal. All these subtleties of the moral sensibility go as much beyond what can be ciphered out from the "laws of association" as the delicacies of sentiment possible between a pair of young lovers go beyond such precepts of the "etiquette to be observed during engagement" as are printed in manuals of social form.

No! Purely inward forces are certainly at work here. All the higher, more penetrating ideals are revolutionary. They present themselves far less in the guise of effects of past experience than in that of probable cause of future experience, factors to which the environment and the lessons it has so far taught us must learn to bend.

This is all I can say of the psychological question now. In the last chapter of a recent work² I have sought to prove in a general way the existence, in our thought, of relations which do not merely repeat the couplings of experience. Our ideals have certainly many sources. They are not all explicable in signifying corporeal pleasures to be gained, and pains to be escaped. And for having so constantly perceived this psychological fact, we must applaud the intuitionist school. Whether or not such applause must be extended to that school's other characteristics will appear as we take up the following questions.

The next one in order is the metaphysical question, of what we mean by the words "obligation," "good," and "ill."

II

First of all, it appears that such words can have no application or relevancy in a world in which no sentient life exists. Imagine an absolutely

2. *The Principles of Psychology*, New York, H. Holt & Co., 1890.

material world, containing only physical and chemical facts, and existing from eternity without a God, without even an interested spectator: would there be any sense in saying of that world that one of its states is better than another? Or if there were two such worlds possible, would there be any rhyme or reason in calling one good and the other bad—good or bad positively, I mean, and apart from the fact that one might relate itself better than the other to the philosopher's private interests? But we must leave these private interests out of the account, for the philosopher is a mental fact, and we are asking whether goods and evils and obligations exist in physical facts *per se*. Surely there is no *status* for good and evil to exist in, in a purely insentient world. How can one physical fact, considered simply as a physical fact, be "better" than another? Betterness is not a physical relation. In its mere material capacity, a thing can no more be good or bad than it can be pleasant or painful. Good for what? Good for the production of another physical fact, do you say? But what in a purely physical universe demands the production of that other fact? Physical facts simply *are* or *are not*; and neither when present or absent, can they be supposed to make demands. If they do, they can only do so by having desires; and then they have ceased to be purely physical facts, and have become facts of conscious sensibility. Goodness, badness, and obligation must be *realized* somewhere in order really to exist; and the first step in ethical philosophy is to see that no merely inorganic "nature of things" can realize them. Neither moral relations nor the moral law can swing *in vacuo*. Their only habitat can be a mind which feels them; and no world composed of merely physical facts can possibly be a world to which ethical propositions apply.

The moment one sentient being, however, is made a part of the universe, there is a chance for goods and evils really to exist. Moral relations now have their *status*, in that being's consciousness. So far as he feels anything to be good, he *makes* it good. It *is* good, for him; and being good for him, is absolutely good, for he is the sole creator of values in that universe, and outside of his opinion things have no moral character at all.

In such a universe as that it would of course be absurd to raise the question of whether the solitary thinker's judgments of good and ill are true or not. Truth supposes a standard outside of the thinker to which he must conform; but here the thinker is a sort of divinity, subject to no higher judge. Let us call the supposed universe which he inhabits a *moral solitude*. In such a moral solitude it is clear that there can be no outward obligation, and that the only trouble the god-like thinker is liable to have will be over the consistency of his own several ideals with one another. Some of these will no doubt be more pungent and appealing than the rest, their goodness will have a profounder, more penetrating taste; they will return to haunt him with more obstinate regrets if violated. So the thinker will have to order his life with them as its chief determinants, or else remain inwardly discordant and unhappy. Into whatever equilibrium he may settle, though, and however he may straighten out his system, it will be a right

system; for beyond the facts of his own subjectivity there is nothing moral in the world.

If now we introduce a second thinker with his likes and dislikes into the universe, the ethical situation becomes much more complex, and several possibilities are immediately seen to obtain.

One of these is that the thinkers may ignore each other's attitude about good and evil altogether, and each continue to indulge his own preferences, indifferent to what the other may feel or do. In such a case we have a world with twice as much of the ethical quality in it as our moral solitude, only it is without ethical unity. The same object is good or bad there, according as you measure it by the view which this one or that one of the thinkers takes. Nor can you find any possible ground in such a world for saying that one thinker's opinion is more correct than the other's, or that either has the truer moral sense. Such a world, in short, is not a moral universe but a moral dualism. Not only is there no single point of view within it from which the values of things can be unequivocally judged, but there is not even a demand for such a point of view, since the two thinkers are supposed to be indifferent to each other's thoughts and acts. Multiply the thinkers into a pluralism, and we find realized for us in the ethical sphere something like that world which the antique sceptics conceived of—in which individual minds are the measures of all things, and in which no one "objective" truth, but only a multitude of "subjective" opinions, can be found.

But this is the kind of world with which the philosopher, so long as he holds to the hope of a philosophy, will not put up. Among the various ideals represented, there must be, he thinks, some which have the more truth or authority; and to these the others *ought* to yield, so that system and subordination may reign. Here in the word "ought" the notion of *obligation* comes emphatically into view, and the next thing in order must be to make its meaning clear.

Since the outcome of the discussion so far has been to show us that nothing can be good or right except so far as some consciousness feels it to be good or thinks it to be right, we perceive on the very threshold that the real superiority and authority which are postulated by the philosopher to reside in some of the opinions, and the really inferior character which he supposes must belong to others, cannot be explained by any abstract moral "nature of things" existing antecedently to the concrete thinkers themselves with their ideals. Like the positive attributes good and bad, the comparative ones better and worse must be *realized* in order to be real. If one ideal judgment be objectively better than another, that betterness must be made flesh by being lodged concretely in some one's actual perception. It cannot float in the atmosphere, for it is not a sort of meteorological phenomenon, like the aurora borealis or the zodiacal light. Its *esse* is *percipi*, like the

esse of the ideals themselves between which it obtains. The philosopher, therefore, who seeks to know which ideal ought to have supreme weight and which one ought to be subordinated, must trace the *ought* itself to the *de facto* constitution of some existing consciousness, behind which, as one of the data of the universe, he as a purely ethical philosopher is unable to go. This consciousness must make the one ideal right by feeling it to be right, the other wrong by feeling it to be wrong. But now what particular consciousness in the universe *can* enjoy this prerogative of obliging others to conform to a rule which it lays down?

If one of the thinkers were obviously divine, while all the rest were human, there would probably be no practical dispute about the matter. The divine thought would be the model, to which the others should conform. But still the theoretic question would remain, what is the ground of the obligation, even here?

In our first essays at answering this question, there is an inevitable tendency to slip into an assumption which ordinary men follow when they are disputing with one another about questions of good and bad. They imagine an abstract moral order in which the objective truth resides; and each tries to prove that this pre-existing order is more accurately reflected in his own ideas than in those of his adversary. It is because one disputant is backed by this overarching abstract order that we think the other should submit. Even so, when it is a question no longer of two finite thinkers, but of God and ourselves—we follow our usual habit, and imagine a sort of *de jure* relation, which antedates and overarches the mere facts, and would make it right that we should conform our thoughts to God's thoughts, even though he made no claim to that effect, and though we preferred *de facto* to go on thinking for ourselves.

But the moment we take a steady look at the question, *we see not only that without a claim actually made by some concrete person there can be no obligation, but that there is some obligation wherever there is a claim.* Claim and obligation are, in fact, coextensive terms; they cover each other exactly. Our ordinary attitude of regarding ourselves as subject to an overarching system of moral relations, true "in themselves," is therefore either an out-and-out superstition, or else it must be treated as a merely provisional abstraction from that real Thinker in whose actual demand upon us to think as he does our obligation must be ultimately based. In a theistic-ethical philosophy that thinker in question is, of course, the Deity to whom the existence of the universe is due.

I know well how hard it is for those who are accustomed to what I have called the superstitious view, to realize that every *de facto* claim creates in so far forth an obligation. We inveterately think that something which we call the "validity" of the claim is what gives to it its obligatory character, and that this validity is something outside of the claim's mere existence as a matter of fact. It rains down upon the claim, we think, from some sublime

dimension of being, which the moral law inhabits, much as upon the steel of the compass-needle the influence of the Pole rains down from out of the starry heavens. But again, how can such an inorganic abstract character of imperativeness, additional to the imperativeness which is in the concrete claim itself, *exist*? Take any demand, however slight, which any creature, however weak, may make. Ought it not, for its own sole sake, to be satisfied? If not, prove why not. The only possible kind of proof you could adduce would be the exhibition of another creature who should make a demand that ran the other way. The only possible reason there can be why any phenomenon ought to exist is that such a phenomenon actually is desired. Any desire is imperative to the extent of its amount; it *makes* itself valid by the fact that it exists at all. Some desires, truly enough, are small desires; they are put forward by insignificant persons, and we customarily make light of the obligations which they bring. But the fact that such personal demands as these impose small obligations does not keep the largest obligations from being personal demands.

If we must talk impersonally, to be sure we can say that "the universe" requires, exacts, or makes obligatory such or such an action, whenever it expresses itself through the desires of such or such a creature. But it is better not to talk about the universe in this personified way, unless we believe in a universal or divine consciousness which actually exists. If there be such a consciousness, then its demands carry the most of obligation simply because they are the greatest in amount. But it is even then not *abstractly* right that we should respect them. It is only *concretely* right—or right after the fact, and by virtue of the fact, that they are actually made. Suppose we do not respect them, as seems largely to be the case in this queer world. That ought not to be, we say; that is wrong. But in what way is this fact of wrongness made more acceptable or intelligible when we imagine it to consist rather in the laceration of an *a priori* ideal order than in the disappointment of a living personal God? Do we, perhaps, think that we cover God and protect him and make his impotence over us less ultimate, when we back him up with this *a priori* blanket from which he may draw some warmth of further appeal? But the only force of appeal to *us*, which either a living God or an abstract ideal order can wield, is found in the "everlasting ruby vaults" of our own human hearts, as they happen to beat responsive and not irresponsive to the claim. So far as they do feel it when made by a living consciousness, it is life answering to life. A claim thus livingly acknowledged is acknowledged with a solidity and fulness which no thought of an "ideal" backing can render more complete; while if, on the other hand, the heart's response is withheld, the stubborn phenomenon is there of an impotence in the claims which the universe embodies, which no talk about an eternal nature of things can gloze over or dispel. An ineffective *a priori* order is as impotent a thing as an ineffective God; and in the eye of philosophy, it is as hard a thing to explain.

We may now consider that what we distinguished as the metaphysical question in ethical philosophy is sufficiently answered, and that we have learned what the words "good," "bad," and "obligation" severally mean. They mean no absolute natures, independent of personal support. They are objects of feeling and desire, which have no foothold or anchorage in Being, apart from the existence of actually living minds.

Wherever such minds exist, with judgments of good and ill, and demands upon one another, there is an ethical world in its essential features. Were all other things, gods and men and starry heavens, blotted out from this universe, and were there left but one rock with two loving souls upon it, that rock would have as thoroughly moral a constitution as any possible world which the eternities and immensities could harbor. It would be a tragic constitution, because the rock's inhabitants would die. But while they lived, there would be real good things and real bad things in the universe; there would be obligations, claims, and expectations; obediences, refusals, and disappointments; compunctions and longings for harmony to come again, and inward peace of conscience when it was restored; there would, in short, be a moral life, whose active energy would have no limit but the intensity of interest in each other with which the hero and heroine might be endowed.

We, on this terrestrial globe, so far as the visible facts go, are just like the inhabitants of such a rock. Whether a God exist, or whether no God exist, in yon blue heaven above us bent, we form at any rate an ethical republic here below. And the first reflection which this leads to is that ethics have as genuine and real a foothold in a universe where the highest consciousness is human, as in a universe where there is a God as well. "The religion of humanity" affords a basis for ethics as well as theism does. Whether the purely human system can gratify the philosopher's demand as well as the other is a different question, which we ourselves must answer ere we close.

III

The last fundamental question in Ethics was, it will be remembered, the *casuistic* question. Here we are, in a world where the existence of a divine thinker has been and perhaps always will be doubted by some of the lookers-on, and where, in spite of the presence of a large number of ideals in which human beings agree, there are a mass of others about which no general consensus obtains. It is hardly necessary to present a literary picture of this, for the facts are too well known. The wars of the flesh and the spirit in each man, the concupiscences of different individuals pursuing the same unshareable material or social prizes, the ideals which contrast so according to races, circumstances, temperaments, philosophical beliefs, etc.—all form a maze of apparently inextricable confusion with no obvious Ariadne's

thread to lead one out. Yet the philosopher, just because he is a philosopher, adds his own peculiar ideal to the confusion (with which if he were willing to be a sceptic he would be passably content), and insists that over all these individual opinions there is a *system of truth* which he can discover if he only takes sufficient pains.

We stand ourselves at present in the place of that philosopher, and must not fail to realize all the features that the situation comports. In the first place we will not be sceptics; we hold to it that there is a truth to be ascertained. But in the second place we have just gained the insight that truth cannot be a self-proclaiming act of laws, or an abstract "moral reason," but can only exist in act, or in the shape of an opinion held by some thinker really to be found. There is, however, no visible thinker invested with authority. Shall we then simply proclaim our own ideals as the lawgiving ones? No; for if we are true philosophers we must throw our own spontaneous ideals, even the dearest, impartially in with that total mass of ideals which are fairly to be judged. But how then can we as philosophers ever find a test how avoid complete moral scepticism on the one hand, and on the other escape bringing a wayward personal standard of our own along with us, on which we simply pin our faith?

The dilemma is a hard one, nor does it grow a bit more easy as we revolve it in our minds. The entire undertaking of the philosopher obliges him to seek an impartial test. That test, however, must be incarnated in the demand of some actually existent person; and how can he pick out the person save by an act in which his own sympathies and prepossessions are implied?

One method indeed presents itself, and has as a matter of history been taken by the more serious ethical schools. If the heap of things demanded proved on inspection less chaotic than at first they seemed, if they furnished their own relative test and measure, then the casuistic problem would be solved. If it were found that all goods *quâ* goods contained a common essence, then the amount of this essence in any one good would show its rank in the scale of goodness, and order could be quickly made; for this essence would be *the* good upon which all thinkers were agreed, the relatively objective and universal good that the philosopher seeks. Even his own private ideals would be measured by their share of it, and find their rightful place among the rest.

Various essences of good have thus been found and proposed as bases of the ethical system. Thus, to be a mean between two extremes; to be recognized by a special intuitive faculty; to make the agent happy for the moment; to make others as well as him happy in the long run; to add to his perfection or dignity; to harm no one; to follow from reason or flow from universal law; to be in accordance with the will of God; to promote the survival of the human species on this planet—are so many tests, each of

which has been maintained by somebody to constitute the essence of all good things or actions so far as they are good.

No one of the measures that have been actually proposed has, however, given general satisfaction. Some are obviously not universally present in all cases—*e.g.*, the character of harming no one, or that of following a universal law; for the best course is often cruel; and many acts are reckoned good on the sole condition that they be exceptions, and serve not as examples of a universal law. Other characters, such as following the will of God, are unascertainable and vague. Others again, like survival, are quite indeterminate in their consequences, and leave us in the lurch where we most need their help: a philosopher of the Sioux Nation, for example, will be certain to use the survival-criterion in a very different way from ourselves. The best, on the whole, of these marks and measures of goodness seems to be the capacity to bring happiness. But in order not to break down fatally, this test must be taken to cover innumerable acts and impulses that never *aim* at happiness; so that, after all, in seeking for a universal principle we inevitably are carried onward to the *most* universal principle—that *the essence of good is simply to satisfy demand*. The demand may be for anything under the sun. There is really no more ground for supposing that all our demands can be accounted for by one universal underlying kind of motive than there is ground for supposing that all physical phenomena are cases of a single law. The elementary forces in ethics are probably as plural as those of physics are. The various ideals have no common character apart from the fact that they are ideals. No single abstract principle can be so used as to yield to the philosopher anything like a scientifically accurate and genuinely useful casuistic scale.

A look at another peculiarity of the ethical universe, as we find it, will still further show us the philosopher's perplexities. As a purely theoretic problem, namely, the casuistic question would hardly ever come up at all. If the ethical philosopher were only asking after the best *imaginable* system of goods he would indeed have an easy task; for all demands as such are *prima facie* respectable, and the best simply imaginary world would be one in which *every* demand was gratified as soon as made. Such a world would, however, have to have a physical constitution entirely different from that of the one which we inhabit. It would need not only a space, but a time, of *n*-dimensions, to include all the acts and experiences incompatible with one another here below, which would then go on in conjunction—such as spending our money, yet growing rich; taking our holiday, yet getting ahead with our work; shooting and fishing, yet doing no hurt to the beasts; gaining no end of experience, yet keeping our youthful freshness of heart; and the like. There can be no question that such a system of things, however brought about, would be the absolutely ideal system; and that if a philosopher could create universes *a priori*, and provide all the mechanical

conditions, that is the sort of universe which he should unhesitatingly create.

But this world of ours is made on an entirely different pattern, and the casuistic question here is most tragically practical. The actually possible in this world is vastly narrower than all that is demanded; and there is always a *pinch* between the ideal and the actual which can only be got through by leaving part of the ideal behind. There is hardly a good which we can imagine except as competing for the possession of the same bit of space and time with some other imagined good. Every end of desire that presents itself appears exclusive of some other end of desire. Shall a man drink and smoke, *or* keep his nerves in condition?—he cannot do both. Shall he follow his fancy for Amelia, *or* for Henrietta?—both cannot be the choice of his heart. Shall he have the dear old Republican party, *or* a spirit of unsophistication in public affairs?—he cannot have both, etc. So that the ethical philosopher's demand for the right scale of subordination in ideals is the fruit of an altogether practical need. Some part of the ideal must be butchered, and he needs to know which part. It is a tragic situation, and no mere speculative conundrum, with which he has to deal.

Now *we* are blinded to the real difficulty of the philosopher's task by the fact that we are born into a society whose ideals are largely ordered already. If we follow the ideal which is conventionally highest, the others which we butcher either die and do not return to haunt us; or if they come back and accuse us of murder, every one applauds us for turning to them a deaf ear. In other words, our environment encourages us not to be philosophers but partisans. The philosopher, however, cannot, so long as he clings to his own ideal of objectivity, rule out any ideal from being heard. He is confident, and rightly confident, that the simple taking counsel of his own intuitive preferences would be certain to end in a mutilation of the fulness of the truth. The poet Heine is said to have written "Bunsen" in the place of "*Gott*" in his copy of that author's work entitled *God in History*, so as to make it read "Bunsen in der Geschichte." Now, with no disrespect to the good and learned Baron, is it not safe to say that any single philosopher, however wide his sympathies, must be just such a *Bunsen in der Geschichte* of the moral world, so soon as he attempts to put his own ideas of order into that howling mob of desires, each struggling to get breathing-room for the ideal to which it clings? The very best of men must not only be insensible, but be ludicrously and peculiarly insensible, to many goods. As a militant, fighting free-handed that the goods to which he *is* sensible may not be submerged and lost from out of life, the philosopher, like every other human being, is in a natural position. But think of Zeno and of Epicurus, think of Calvin and of Paley, think of Kant and Schopenhauer, of Herbert Spencer and John Henry Newman, no longer as one-sided champions of special ideals, but as schoolmasters deciding what all must think—and what more grotesque topic could a satirist wish for on which to

exercise his pen? The fabled attempt of Mrs. Partington to arrest the rising tide of the North Atlantic with her broom was a reasonable spectacle compared with their effort to substitute the content of their clean-shaven systems for that exuberant mass of goods with which all human nature is in travail, and groaning to bring to the light of day. Think, furthermore, of such individual moralists, no longer as mere schoolmasters, but as pontiffs armed with the temporal power, and having authority in every concrete case of conflict to order which good shall be butchered and which shall be suffered to survive—and the notion really turns one pale. All one's slumbering revolutionary instincts waken at the thought of any single moralist wielding such powers of life and death. Better chaos forever than an order based on any closet-philosopher's rule, even though he were the most enlightened possible member of his tribe. No! if the philosopher is to keep his judicial position, he must never become one of the parties to the fray.

What can he do, then, it will now be asked, except to fall back on scepticism and give up the notion of being a philosopher at all?

But do we not already see a perfectly definite path of escape which is open to him just because he is a philosopher, and not the champion of one particular ideal? Since everything which is demanded is by that fact a good, must not the guiding principle for ethical philosophy (since all demands conjointly cannot be satisfied in this poor world) be simply to satisfy at all times *as many demands as we can*? That act must be the best act, accordingly, which makes for the *best whole*, in the sense of awakening the least sum of dissatisfactions. In the casuistic scale, therefore, those ideals must be written highest which *prevail at the least cost*, or by whose realization the least possible number of other ideals are destroyed. Since victory and defeat there must be, the victory to be philosophically prayed for is that of the more inclusive side—of the side which even in the hour of triumph will to some degree do justice to the ideals in which the vanquished party's interests lay. The course of history is nothing but the story of men's struggles from generation to generation to find the more and more inclusive order. *Invent some manner* of realizing your own ideals which will also satisfy the alien demands—that and that only is the path of peace! Following this path, society has shaken itself into one sort of relative equilibrium after another by a series of social discoveries quite analogous to those of science. Polyandry and polygamy and slavery, private warfare and liberty to kill, judicial torture and arbitrary royal power have slowly succumbed to actually aroused complaints; and though some one's ideals are unquestionably the worse off for each improvement, yet a vastly greater total number of them find shelter in our civilized society than in the older savage ways. So far then, and up to date, the casuistic scale is made for the philosopher already far better than he can ever make it for himself. An experiment of the most searching kind has proved that the laws and usages of the

land are what yield the maximum of satisfaction to the thinkers taken all together. The presumption in cases of conflict must always be in favor of the conventionally recognized good. The philosopher must be a conservative, and in the construction of his casuistic scale must put the things most in accordance with the customs of the community on top.

And yet if he be a true philosopher he must see that there is nothing final in any actually given equilibrium of human ideals, but that, as our present laws and customs have fought and conquered other past ones, so they will in their turn be overthrown by any newly discovered order which will hush up the complaints that they still give rise to, without producing others louder still. "Rules are made for man, not man for rules"—that one sentence is enough to immortalize Green's *Prolegomena to Ethics*. And although a man always risks much when he breaks away from established rules and strives to realize a larger ideal whole than they permit, yet the philosopher must allow that it is at all times open to any one to make the experiment, provided he fear not to stake his life and character upon the throw. The pinch is always here. Pent in under every system of moral rules are innumerable persons whom it weighs upon, and goods which it represses; and these are always rumbling and grumbling in the background, and ready for any issue by which they may get free. See the abuses which the institution of private property covers, so that even today it is shamelessly asserted among us that one of the prime functions of the national government is to help the adroiter citizens to grow rich. See the unnamed and unnamable sorrows which the tyranny, on the whole so beneficent, of the marriage-institution brings to so many, both of the married and the unwed. See the wholesale loss of opportunity under our *régime* of so-called equality and industrialism, with the drummer and the counter-jumper in the saddle, for so many faculties and graces which could flourish in the feudal world. See our kindness for the humble and the outcast, how it wars with that stern weeding-out which until now has been the condition of every perfection in the breed. See everywhere the struggle and the squeeze; and everlastingly the problem how to make them less. The anarchists, nihilists, and free-lovers; the free-silverites, socialists, and single-tax men; the free-traders and civil-service reformers; the prohibitionists and anti-vivisectionists; the radical Darwinians with their idea of the suppression of the weak—these and all the conservative sentiments of society arrayed against them, are simply deciding through actual experiment by what sort of conduct the maximum amount of good can be gained and kept in this world. These experiments are to be judged, not *a priori*, but by actual finding, after the fact of their making, how much more outcry or how much appeasement comes about. What closet-solutions can possibly anticipate the result of trials made on such a scale? Or what can any superficial theorist's judgement be worth, in a world where every one of

hundreds of ideals has its special champion already provided in the shape of some genius expressly born to feel it, and to fight to death in its behalf? The pure philosopher can only follow the windings of the spectacle, confident that the line of least resistance will always be towards the richer and the more inclusive arrangement, and that by one tack after another some approach to the kingdom of heaven is incessantly made.

IV

All this amounts to saying that, so far as the casuistic question goes, ethical science is just like physical science, and instead of being deducible all at once from abstract principles, must simply bide its time, and be ready to revise its conclusions from day to day. The presumption of course, in both sciences, always is that the vulgarly accepted opinions are true, and the right casuistic order that which public opinion believes in; and surely it would be folly quite as great, in most of us, to strike out independently and to aim at originality in ethics as in physics. Every now and then, however, some one is born with the right to be original, and his revolutionary thought or action may bear prosperous fruit. He may replace old "laws of nature" by better ones; he may, by breaking old moral rules in a certain place, bring in a total condition of things more ideal than would have followed had the rules been kept.

On the whole, then, we must conclude that no philosophy of ethics is possible in the old-fashioned absolute sense of the term. Everywhere the ethical philosopher must wait on facts. The thinkers who create the ideals come he knows not whence, their sensibilities are evolved he knows not how; and the question as to which of two conflicting ideals will give the best universe then and there, can be answered by him only through the aid of the experience of other men. I said some time ago, in treating of the "first" question, that the intuitional moralists deserve credit for keeping most clearly to the psychological facts. They do much to spoil this merit on the whole, however, by mixing with it that dogmatic temper which, by absolute distinctions and unconditional "thou shalt nots," changes a growing, elastic, and continuous life into a superstitious system of relics and dead bones. In point of fact, there are no absolute evils, and there are no non-moral goods; and the *highest* ethical life—however few may be called to bear its burdens—consists at all times in the breaking of rules which have grown too narrow for the actual case. There is but one unconditional commandment, which is that we should seek incessantly, with fear and trembling, so to vote and to act as to bring about the very largest total universe of good which we can see. Abstract rules indeed can help; but they help the less in proportion as our intuitions are more piercing, and our vocation is

the stronger for the moral life. For every real dilemma is in literal strictness a unique situation; and the exact combination of ideals realized and ideals disappointed which each decision creates is always a universe without a precedent, and for which no adequate previous rule exists. The philosopher, then, *quâ* philosopher, is no better able to determine the best universe in the concrete emergency than other men. He sees, indeed, somewhat better than most men what the question always is—not a question of this good or that good simply taken, but of the two total universes with which these goods respectively belong. He knows that he must vote always for the richer universe, for the good which seems most organizable, most fit to enter into complex combinations, most apt to be a member of a more inclusive whole. But which particular universe this is he cannot know for certain in advance; he only knows that if he makes a bad mistake the cries of the wounded will soon inform him of the fact. In all this the philosopher is just like the rest of us non-philosophers, so far as we are just and sympathetic instinctively, and so far as we are open to the voice of complaint. His function is in fact indistinguishable from that of the best kind of statesman at the present day. His books upon ethics, therefore, so far as they truly touch the moral life, must more and more ally themselves with a literature which is confessedly tentative and suggestive rather than dogmatic—I mean with novels and dramas of the deeper sort, with sermons, with books on statecraft and philanthropy and social and economical reform. Treated in this way ethical treatises may be voluminous and luminous as well; but they never can be *final*, except in their abstractest and vaguest features; and they must more and more abandon the old-fashioned, clear-cut, and would-be “scientific” form.

V

The chief of all the reasons why concrete ethics cannot be final is that they have to wait on metaphysical and theological beliefs. I said some time back that real ethical relations existed in a purely human world. They would exist even in what we called a moral solitude if the thinker had various ideals which took hold of him in turn. His self of one day would make demands on his self of another; and some of the demands might be urgent and tyrannical, while others were gentle and easily put aside. We call the tyrannical demands *imperatives*. If we ignore these we do not hear the last of it. The good which we have wounded returns to plague us with interminable crops of consequential damages, compunctions, and regrets. Obligation can thus exist inside a single thinker’s consciousness; and perfect peace can abide with him only so far as he lives according to some sort of a casuistic scale which keeps his more imperative goods on top. It is

the nature of these goods to be cruel to their rivals. Nothing shall avail when weighed in the balance against them. They call out all the mercilessness in our disposition, and do not easily forgive us if we are so soft-hearted as to shrink from sacrifice in their behalf.

The deepest difference, practically, in the moral life of man is the difference between the easy-going and the strenuous mood. When in the easy-going mood the shrinking from present ill is our ruling consideration. The strenuous mood, on the contrary, makes us quite indifferent to present ill, if only the greater ideal be attained. The capacity for the strenuous mood probably lies slumbering in every man, but it has more difficulty in some than in others in waking up. It needs the wilder passions to arouse it, the big fears, loves, and indignations; or else the deeply penetrating appeal of some one of the higher fidelities, like justice, truth, or freedom. Strong relief is a necessity of its vision; and a world where all the mountains are brought down and all the valleys are exalted is no congenial place for its habitation. This is why in a solitary thinker this mood might slumber on forever without waking. His various ideals, known to him to be mere preferences of his own, are too nearly of the same denominational value: he can play fast or loose with them at will. This too is why, in a merely human world without a God, the appeal to our moral energy falls short of its maximal stimulating power. Life, to be sure, is even in such a world a genuinely ethical symphony; but it is played in the compass of a couple of poor octaves, and the infinite scale of values fails to open up. Many of us, indeed—like Sir James Stephen in those eloquent *Essays by a Barrister*—would openly laugh at the very idea of the strenuous mood being awakened in us by those claims of remote posterity which constitute the last appeal of the religion of humanity. We do not love these men of the future keenly enough; and we love them perhaps the less the more we hear of their evolutionized perfection, their high average longevity and education, their freedom from war and crime, their relative immunity from pain and zymotic disease, and all their other negative superiorities. This is all too finite, we say; we see too well the vacuum beyond. It lacks the note of infinitude and mystery, and may all be dealt with in the don't-care mood. No need of agonizing ourselves or making others agonize for these good creatures just at present.

When, however, we believe that a God is there, and that he is one of the claimants, the infinite perspective opens out. The scale of the symphony is incalculably prolonged. The more imperative ideals now begin to speak with an altogether new objectivity and significance, and to utter the penetrating, shattering, tragically challenging note of appeal. They ring out like the call of Victor Hugo's alpine eagle, "*qui parle au précipice et que le gouffre entend*," and the strenuous mood awakens at the sound. It saith among the trumpets, ha, ha! it smelleth the battle afar off, the thunder of the captains and the shouting. Its blood is up; and cruelty to the lesser

claims, so far from being a deterrent element, does but add to the stern joy with which it leaps to answer to the greater. All through history, in the periodical conflicts of puritanism with the don't-care temper, we see the antagonism of the strenuous and genial moods, and the contrast between the ethics of infinite and mysterious obligation from on high, and those of prudence and the satisfaction of merely finite need.

The capacity of the strenuous mood lies so deep down among our natural human possibilities that even if there were no metaphysical or traditional grounds for believing in a God, men would postulate one simply as a pretext for living hard, and getting out of the game of existence its keenest possibilities of zest. Our attitude towards concrete evils is entirely different in a world where we believe there are none but finite demanders, from what it is in one where we joyously face tragedy for an infinite demander's sake. Every sort of energy and endurance, of courage and capacity for handling life's evils, is set free in those who have religious faith. For this reason the strenuous type of character will on the battlefield of human history always outwear the easy-going type, and religion will drive irreligion to the wall.

It would seem, too—and this is my final conclusion—that the stable and systematic moral universe for which the ethical philosopher asks is fully possible only in a world where there is a divine thinker with all-enveloping demands. If such a thinker existed, his way of subordinating the demands to one another would be the finally valid casuistic scale; his claims would be the most appealing; his ideal universe would be the most inclusive realizable whole. If he now exist, then actualized in his thought already must be that ethical philosophy which we seek as the pattern which our own must evermore approach.³ In the interests of our own ideal of systematically unified moral truth, therefore, we, as would-be philosophers, must postulate a divine thinker, and pray for the victory of the religious cause. Meanwhile, exactly what the thought of the infinite thinker may be is hidden from us even were we sure of his existence; so that our postulation of him after all serves only to let loose in us the strenuous mood. But this is what it does in all men, even those who have no interest in philosophy. The ethical philosopher, therefore, whenever he ventures to say which course of action is the best, is on no essentially different level from the common man. "See, I have set before thee this day life and good and death and evil; therefore, choose life that thou and thy seed may live"—when this challenge comes to us, it is simply our total character and personal genius that are on trial; and if we invoke any so-called philosophy, our choice and use of that also are but revelations of our personal aptitude or incapacity for moral life. From this unsparing practical ordeal no professor's lectures and no array of books can save us. The solving word, for the learned and the unlearned man alike, lies

3. All this is set forth with great freshness and force in the work of my colleague, Professor Josiah Royce: *The Religious Aspect of Philosophy*. Boston, 1885.

in the last resort in the dumb willingnesses and unwillingnesses of their interior characters, and nowhere else. It is not in heaven, neither is it beyond the sea; but the word is very nigh unto thee, in thy mouth and in thy heart, that thou mayest do it.

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Peirce published no book in his lifetime, although many articles and reviews

appeared in various journals, and he brought many projected volumes to various stages of completion. The most important items in the Peircean corpus have appeared in eight volumes as the *Collected Papers of Charles Sanders Peirce*, 8 vols., C. Hartshorne and P. Weiss (eds.), I–VI, 1931–1935, A. W. Burks (ed.), VII–VIII, 1958, Cambridge, Mass., Harvard University Press. Most of the material that will be of interest to the ordinary philosophical reader will be found in Volumes I, V, and VI. Volume V contains most of the material explicitly dealing with pragmatism. One-volume selections from Peirce's writings include *Chance, Love and Logic*, M. R. Cohen (ed.), New York, Harcourt, Brace & World, Inc., 1923 (with essays by Cohen and Dewey), and *The Philosophy of Peirce*, J. Buchler (ed.), New York, Harcourt, Brace & World, Inc., 1940. Help in understanding Peirce can be derived from M. H. Thompson, *The Pragmatic Philosophy of C. S. Peirce*, Chicago, University of Chicago Press, 1953; and W. B. Gallie, *Peirce and Pragmatism*, Harmondsworth, Middlesex, Penguin Books, 1952. The latter is especially useful for the novice. See also *Studies in the Philosophy of C. S. Peirce*, P. P. Wiener and F. H. Young (eds.), Cambridge, Mass., Harvard University Press, 1952; R. B. Braithwaite's "Review of the *Collected Papers of Charles Sanders Peirce*," *Mind*, 1934; Ernest Nagel, "Charles S. Peirce: Pioneer of Modern Empiricism," *Philosophy of Science*, 1940; and W. P. Alston, "Pragmatism and the Verifiability Theory of Meaning," *Philosophical Studies*, 1955; "Pragmatism and the Theory of Signs in Peirce," *Philosophy and Phenomenological Research*, 17 (1956–1957). And for interesting historical sidelights see P. P. Wiener, *Evolution and the Founders of Pragmatism*, Cambridge, Mass., Harvard University Press, 1949.



HENRI BERGSON

1859-1941

Introduction

Outwardly Henri Bergson led a singularly uneventful life. Born in Paris of Anglo-Jewish parents, he early showed great intellectual promise. As a student he distinguished himself in classics and mathematics as well as philosophy, and for a time he seriously considered a mathematical career. After completing his philosophical studies at the École Normale in 1881, he taught in provincial lycées (preparatory schools) until 1889, then at the famous Lycée Henri Quatre in Paris, finally receiving a chair in philosophy at the Collège de France, where he was an increasingly famous lecturer until his resignation in 1921. When the League of Nations set up a committee for intellectual cooperation, Bergson was made its president, but in 1925 poor health forced him to resign this post. He lived on in the environs of Paris in gradually worsening health until his death in 1941. Shortly before his death he attracted notice for his decision to renounce all his honors and honorary positions rather than accept exemption from the anti-Semitic laws passed by the Vichy government.

At the beginning of his career Bergson was a follower of Spencer, very much in sympathy with the materialistic, mechanistic philosophies then prevalent. Bergson describes the decisive movement away from this sort of position in a letter to William James, written in 1908.

. . . I cannot but attribute great importance to the change which took place in my way of thinking during the two years which followed my leaving the École Normale, from 1881 to 1883. I had remained up to that time wholly imbued with mechanistic theories, to which I had been led at an early date by the reading of Herbert Spencer, a philosopher to whom I adhered almost unreservedly. It was my intention to devote myself to what was then called the philosophy of the sciences, and to that end I had undertaken, after leaving the École Normale, to examine some of the fundamental scientific notions. It was the analysis of the notion of time, as that enters into mechanics and physics, which overturned all my ideas. I saw, to my great astonishment, that scientific time does not *endure*, that it would involve no change in our scientific knowledge if the totality of the real were unfolded all at once, instantaneously, and that positive science consists essentially in the elimination of duration. This was the point of departure of a series of reflections which brought me, by gradual steps, to reject almost all of what I had hitherto accepted and to change my point of view completely. . . .

In these reflections Bergson became convinced that, as is brought out so vividly in Zeno's paradox of the arrow,* conceptual thought simply represented a number of fixed positions over which a process takes place, but missed the process itself, the transition between these points. And the same charge is to be levied against our methods of measuring time. If I determine the amount of time it takes me to read a page, I note the position of the hands of my watch at the moment I began to read and again at the moment at which I cease reading. That is, what I have done is to note the coincidence of my state at the beginning of the reading with a certain position of the hands of the watch, and likewise for my state at the end of the reading. This means that I have only noted simultaneities; I have not dealt with the process itself which goes on between these points. Mobility itself escapes my instruments.

So far Bergson is pointing to one aspect of the world which seems to be neglected by the "intellect" in its usual modes of operation. But this omission comes to have a much more radical significance for him. Let us ask: in what way could we remedy this defect? How can we make contact with the very reality of change which so nimbly eludes both science and everyday thought. Bergson answers: by reflectively turning one's attention on one's own duration. Bergson, who excelled at word-painting, gave many vivid descriptions of what one encounters when he pares away ordinary temporal concepts and simply lets his attention move with the flow of experience. Here is an example from *Creative Evolution*:

Let us take the most stable of internal states, the visual perception of a motionless external object. The object may remain the same, I may look at it from the same side, at the same angle, in the same light; nevertheless the vision I now have of it differs from that which I have just had even if only because

* Consider the flight of an arrow. At any moment during that flight the arrow is at a certain position. But then if we consider the totality of moments of which the time taken by the flight is made up, we are forced to the conclusion that the arrow is always, in every moment, at rest. Then how does it get from the bow to the target? Bergson was deeply impressed by these paradoxes. He once said, "Metaphysics dates from the day when Zeno of Elea pointed out the inherent contradictions of movement and change, as our intellect represents them."¹

the one is an instant older than the other. My memory is there, which conveys something of the past into the present. My mental state, as it advances on the road of time, is continually swelling with the duration which it accumulates: it goes on increasing—rolling upon itself, as a snowball on the snow. Still more is this the case with states more deeply internal, such as sensations, feelings, desires, etc., . . . The truth is that we change without ceasing, and that the state itself is nothing but change.²

It might seem that Bergson could simply insert pure becoming, as revealed by this self-awareness, in the gaps between the fixed moments of the mechanistic scheme, and thereby render it complete. But it quickly turns out that the two will not mix, and that what looked at first to be like the filling of a chink in the wall, turns out to be a charge of dynamite that sends the whole edifice toppling. This incompatibility can be seen from both sides. First, the scientific picture has no room for “*durée réelle*” (real duration); the “intellect” insists on handling the whole thing in its own way.

If it is a question of movement, all the intelligence retains is a series of positions: first one point reached, then another, then still another. But should something happen between these points, immediately the understanding intercalates new positions, and so on indefinitely. It refuses to consider *transition*; if we insist, it so manages that mobility, pushed back into more and more narrow intervals as the number of considered positions increases, recedes, withdraws and finally disappears into the infinitely small.³

And from the other side, the mobility revealed in immediate experience proves equally uncooperative. If you reread the above quotation from *Creative Evolution*, you will see that it implies that no fixed positions or states can be found within immediate experience; the flux is so absolute that it cannot be construed as a transition between fixed points; no such points or parts can be discovered therein. After that passage, Bergson continues:

This amounts to saying that there is no essential difference between passing from one state to another and persisting in the same state. . . . The apparent discontinuity of the psychical life is then due to our attention being fixed on it by a series of separate acts: actually there is only a gentle slope; but in following the broken line of our acts of attention, we think we perceive separate steps. . . . Each is only the best illuminated point of a moving zone which comprises all that we feel or think or will—all, in short, that we are at any given moment. It is this entire zone which in reality makes up our state. Now, states thus defined cannot be regarded as distinct elements. They continue each other in an endless flow.⁴

The indivisible unity of the process revealed in experience, and the impossibility of distinguishing static positions or segments within it, is stated even more strongly in the *Introduction to Metaphysics*. “. . . pure duration excludes all idea of juxtaposition, reciprocal exteriority, and extension” (see p. 60). The categories of the intellect thus have no application to this reality.

Nor is it open to Bergson to hold that this seamless character of process is a

peculiarity of conscious experience, thereby leaving the intellect in secure possession of the physical world. For apart from Bergson's argument that this would leave us with no way to conceive the change that goes on in the physical world, he is proceeding on an assumption, widely shared by twentieth-century philosophers (see the sections on Whitehead, Heidegger, Dewey, Tillich, and Sartre), that human experience is the proper starting point for a doctrine of the nature of reality, that by examining human experience we will discover features that are true of everything that is. (Naturally this assumption assumes different forms for different thinkers. In particular, Dewey would be unhappy with this formulation.) In *Introduction to Metaphysics* Bergson states that his own experience is the only reality he knows from within, in its intrinsic nature, or at least that it is the reality with whose intrinsic nature he is most intimately acquainted. And so he feels that if he is not to follow Kant in abandoning the hope of grasping things as they are in themselves, a course for which Bergson has little inclination, he has no choice but to take his own experience as a clue to the generic nature of things. Thus Bergson is led to consider the flux disclosed in immediate experience to be the deepest nature of anything whatsoever. "Thus, whether it is a question of the internal or the external, of ourselves or of things, reality is mobility itself. That is what I was expressing when I said that there is change, but that there are not things which change."⁵

But then what status are we to assign the picture of the natural world drawn by common sense and science? To answer this question Bergson recurs to the ancient distinction between appearance and reality, but with a difference. Traditionally, philosophers, from Parmenides to Bradley, who have talked in these terms have depicted reality as eternal, immutable, perfectly determinate, whereas appearances are ceaselessly changing, and lack determinacy and definiteness. And the basic ground for this distinction is the notion of rational intelligibility. We can only fully understand what is fixed, stable, perfectly determinate; what is continuously changing and lacks clear-cut outlines is in principle unintelligible.

First then, in my judgment, we must make a distinction and ask, What is that which always is and has no becoming; and what is that which is always becoming and never is? That which is apprehended by intelligence and reason is always in the same state; but that which is conceived by opinion with the help of sensation and without reason, is always in a process of becoming and perishing and never really is.⁶

If we combine this with Parmenides's principle, "it is the same thing that can be thought and that can be," we get the conclusion that only the stable and unchanging is fully real.

Now Bergson agrees that the intellect demands fixity and sharp demarcation in its objects as the condition of its operation; but he departs from the tradition in refusing to equate reality with permeability by the intellect. For Bergson, a child of the Darwinian revolution who was born in the year that saw the appearance of *The Origin of Species*, the human intellect is an adaptive organ that has the practical function of facilitating our adjustment to the natural environment. To secure this adjustment man has to anticipate the behavior of things in

the environment and to manipulate them in the service of his needs. (Bergson suggests that we conceive man as *Homo faber* rather than as *Homo sapiens*.)*

In terms of this conception of intellect we can understand both why intellect must proceed as it does and why it is unnecessary to accept its results as ultimate truth. The intellect deals with reality by dividing process into static moments that it conceives to be strung out along a line,[†] simply because it has to obtain fixed points for its practical anticipations and operations.

And by a natural extension of this procedure, the intellect tries to treat experience itself in the same way, and conceive "a formless *ego*, indifferent and unchangeable, on which it threads the psychic states which it has set up as independent entities. Instead of a flux of fleeting shades merging into each other, it perceives distinct and, so to speak, *solid* colors, set side by side like the beads of a necklace; it must perforce then suppose a thread, also itself solid, to hold the beads together" (*Creative Evolution*, pp. 5-6). Thus our very paradigm of real duration is obscured.

And just because the intellect has this function there is no need to take its deliverances as adequate representations of the true nature of things.

Hence, what the intellect gives us is at best a set of useful fictions. As Bergson puts it in *Introduction to Metaphysics* (see p. 62), the instants and positions distinguished by the intellect are not real parts of the process; they are elements of the symbols by which we represent the process.

To grasp the true nature of things we need a radically different faculty, by which "one is transported into the interior of an object in order to coincide with what there is unique and consequently inexpressible in it" (see p. 59). This faculty, the prime instance of the operation of which is the awareness of one's own duration which we have been considering, Bergson terms "intuition." It is to the contrast of intuition and intellect, and to a presentation of the consequences of this contrast, that the selection here reproduced is largely devoted.

In his major works, Bergson applied his method to many philosophical problems. His first original work, *Time and Free Will* (*Les Données Immédiates de la Conscience*, 1889), contains the earliest statement of his account of immediate experience, and, on the basis of this, a treatment of the problem of free will, which was then agitating French thinkers. Bergson argued that since any analysis into elements, whose laws of combination and separation one might hope to discover, falsified the nature of experience, it follows that human actions

* Here something should be said about Bergson's relation to pragmatism. James and Bergson found each other to be kindred souls (see p. 55). And although the extravagance of their mutual admiration led them (especially James) to represent their viewpoints as more similar than is actually the case, the fact remains that there are strong affinities. It might seem that the insistence on the practical function of the intellect is the most markedly pragmatic strain in Bergson. But interestingly enough, James was more impressed by Bergson's stress on process and the causally indetermined creation of novelty, and by Bergson's rejection of traditional intellectual categories as an adequate instrument for grasping reality. In short, it was the more tender-minded features of James's thought that drew him to Bergson.

† It is obvious that our common modes of thinking about time rely heavily on spatial analogies: moments are strung out on a "line," they are "outside" one another, we move "through" time, and so on. Bergson constantly inveighs against this "spatialization" of time and traces many philosophical sins to this tendency.

are not subject to scientific prediction. Experience grows not by a recombination of elements, but by the continuous modification of a simple indivisible unity.

Thus our personality shoots, grows and ripens without ceasing. Each of its moments is something new added to what was before. We may go further: it is not only something new, but something unforeseeable. Doubtless, my present state is explained by what was in me and by what was acting on me a moment ago. In analyzing it I should find no other elements. But even a superhuman intelligence would not have been able to foresee the simple indivisible form which gives to these purely abstract elements their concrete organization. For to foresee consists of projecting into the future what has been perceived in the past, or of imagining for a later time a new grouping, in a new order, of elements already perceived. But that which has never been perceived, and which is at the same time simple, is necessarily unforeseeable. Now such is the case with each of our states, regarded as a moment in a history that is gradually unfolding: it is simple, and it cannot have been already perceived, since it concentrates in its indivisibility all that has been perceived and what the present is adding to it besides.⁷

It will be evident to the contemporary reader that this argument takes no account of a behavioristically oriented causal treatment of human action. But of course Bergson was reacting to the introspective, associationist psychology that was prevalent in his day.

In *Matter and Memory* (1896), Bergson faced the difficulty that *forgetting* presents for his position. If content drops out of consciousness as the process continues and then erratically reappears from time to time, one could hardly attribute an indivisible unity to one's experience. Bergson's resolution involves a new theory of memory and of the relation of mind and brain.

Memory, as we have tried to prove, is not a faculty of putting away recollections in a drawer, or of inscribing them in a register. There is no register, no drawer. . . . In reality, the past is preserved by itself, automatically. In its entirety, probably, it follows us at every instant; all that we have felt, thought and willed from our earliest infancy is there, leaning over the present which is about to join it, pressing against the portals of consciousness that would fain leave it outside. The cerebral mechanism is arranged just so as to drive back into the unconscious almost the whole of this past, and to admit beyond the threshold only that which can cast light on the present situation or further the action now being prepared—in short, only that which can give *useful* work.⁸

On this view the function of the brain is not to preserve conscious content but to keep most of the content, which is all there in some sense, from the center of attention.

Creative Evolution (1907), Bergson's most famous work, presents an interpretation of biological evolution that reflects his preoccupation with process, novelty, and indeterminism. Rejecting all the current mechanistic and teleological explanations of evolution, he views it as the manifestation of the ceaseless creative striving of a mysterious dynamic *élan vital* (vital impetus), which is nothing other than our old friend, *durée réelle*, in a new guise. The propulsions of this impetus are neither mechanically determined from behind, nor aimed

at goals that can be formulated in advance. Bergson draws on his considerable knowledge of biology to argue that this interpretation accounts for the facts better than any other; but although this theory was widely discussed at the time, it would be hard to find anyone today who would take it seriously. But the book has other merits. It constitutes a vivid presentation of the leading elements of Bergsonism; and the opening section, from which we have quoted extensively in this introduction, constitutes a concise statement of Bergson's previous conclusions. Moreover, the notion of duration took as well as gave, in its application to biology. Previously, Bergson had made little attempt to characterize duration in its full metaphysical generality, as contrasted with the special form it assumes in human experience. In *Creative Evolution* it is further specified as a vital impulse to the creation of ever new forms. This means that *life* is given a metaphysical primacy, that is, the generic character of being is seen most clearly in living things. In this connection we find an account of, or at least some vivid metaphors for, the genesis of matter from the basic reality, the *élan vital*.

Let us imagine a vessel full of steam at a high pressure, and here and there in its sides a crack through which the steam is escaping in a jet. The steam thrown into the air is nearly all condensed into little drops which fall back, and this condensation and this fall represent simply the loss of something, an interruption, a deficit. But a small part of the jet of steam subsists, uncondensed, for some seconds; it is making an effort to raise the drops which are falling; it succeeds at most in retarding their fall. So, from an immense reservoir of life, jets must be gushing out unceasingly, of which each, falling back, is a world. . . . But let us not carry too far this comparison. It gives us but a feeble and even deceptive image of reality, for the crack, the jet of steam, the forming of the drops are determined necessarily, whereas the creation of a world is a free act, and the life within the material world participates in this liberty. Let us think rather of an action like that of raising the arm; then let us suppose that the arm, left to itself, falls back, and yet that there subsists in it, striving to raise it up again, something of the will that animates it. In this image of a *creative action which unmakes itself* we have already a more exact representation of matter.⁹

Thus Bergson considers the matter dealt with in physical science to be the result of a slackening of the *tension* which is the essence of the creative impulse, and which can be encountered in full force in our own experience.

Note that this view of the status of matter seems to be incompatible with the one presented above. Here Bergson represents matter to be something that is really out there to be known, even though it constitutes a diminution in reality by comparison with its dynamic source. Whereas in the view presented earlier the flux revealed by intuition is the only reality, static things and states being just constructions of the intellect which, however practically useful, correspond to nothing outside it. And this ambivalence is paralleled by an ambivalence as to the relation of intuition and intellect. It is possible to distinguish two different views on this point in *Introduction to Metaphysics*. On the one hand there is the extreme view presented above, according to which intellectual conceptions are mere symbols, albeit useful symbols (see pp. 62ff). But there is also a more moderate position, according to which the intellect, although it provides a less penetrating and adequate view of reality than intuition, nevertheless

does reveal certain (relatively superficial) aspects of things. This view is implied in those passages in which Bergson speaks of intellect as providing external views of a thing, whereas intuition reveals its inner nature (see pp. 58ff.) This view also lies behind Bergson's suggestions that an intuition of the inner nature of the object can give rise to an inexhaustible wealth of conceptual knowledge of it, whereas conversely it is impossible to derive the intuition from propositions about the object, however many there may be (see pp. 76-77). Bergson even suggests that intuitions are ultimately responsible for the great conceptual advances of the sciences (see p. 77).^{*} In these passages he can hardly have been thinking of concepts as pure fictions. See also Bergson's discussion (pp. 62ff.) of the attempts of the intellect to grasp the unity and multiplicity of experience. The point there is not that the unity and multiplicity conceived by the intellect are not really in experience, but rather that they are united there in an intimate fashion which one can understand only through intuition.

This conflict in Bergson's thought also comes out in his oscillation on the question as to whether the intellect, and language, plays any essential role in metaphysics. When he defines metaphysics as "the science that claims to dispense with symbols," he seems to suggest that metaphysics will consist solely of an intuitive apprehension of reality. Any talk going on will have the sole function of evoking the intuition, or of turning the intuitive power in the right direction. It cannot be viewed as a statement of *what* one has apprehended in intuition. But Bergson, like almost all philosophers who begin by saying that reality is ineffable, cannot quite stick to this. He cannot completely suppress the realization that he is, in his books, claiming to say all sorts of things about reality. Note that near the end of *Introduction to Metaphysics* he presents a series of propositions that "have already received in this essay some degree of proof." And so he goes back to the point that if we start from intuition we can then formulate the reality so grasped in an indefinite plurality of assertions. However, he adds the intriguing suggestion that metaphysics will employ "fluid concepts, capable of following reality in all its windings and of adopting the very movement of the inward life of things" (see p. 77). It is regrettable that Bergson does not develop further this distinction between two types of concepts.

It would seem reasonable to take the more moderate of these views as Bergson's considered position, interpreting the more extreme passages as a result of Bergson's penchant for vivid statement. On this basis we could perhaps also reconcile the two views as to the status of matter, in terms of the ancient and obscure notion of degrees of reality paralleling degrees of knowledge. The object of intuition, a perfectly adequate mode of cognition, is fully real. Whereas since intellect gives us only a superficial sort of cognition, its objects are correspondingly lacking in full reality.

In his last major work, *The Two Sources of Morality and Religion* (1932), Bergson makes explicit an affinity with the mystical tradition which had been implicit from the beginning. If we compare Bergsonian intuition with mystical experience as traditionally described, some striking similarities emerge. (1) One attains this sort of awareness by a coincidence or identification with the object;

^{*} Passages like this form the basis of Bergson's defence against the charge of "anti-intellectualism" and "irrationalism."

one is no longer separate from the object, condemned to external views. (2) The object is an indivisible unity that resists distinction into elements or aspects, and therefore is ineffable to the conceptual intellect. (3) Although this is not explicitly emphasized by Bergson prior to *The Two Sources*, it is evident from the way he talks about intuition that it is an intense, even an ecstatic, experience, that it has power to reorient one's pattern of life as well as one's mode of thought. The main difference with traditional mystical philosophy, as found, for example, in Plotinus, is, once again, the substitution of dynamic process for static eternity. In *Two Sources* Bergson distinguished a *closed* morality and religion, which is essentially a means of adjustment to the natural and social environment, with an *open* morality and religion, which transcends these concerns and which springs from intuition of the *élan vital*, now reinterpreted as the mystical awareness of a dynamic spirit of love. The open morality, which springs from this experience, breaks down barriers of nation, race, and class, and enjoins us to universal love. Open religion is directed to carrying forward the process of creative evolution through constantly renewed conscious identification with the creative spirit of love. It is interesting that the deviation from the mystical tradition noted above is reflected in Bergson's exaltation of the practical mystic, who attempts to work "in the world" under the inspiration of his vision, over the pure contemplative, whose ideal is to be uninterruptedly rapt in the vision itself.

Thus *duré réelle*, which became further qualified as a vital impetus in *Creative Evolution*, is here promoted to a conscious, at least quasi-personal status. And in this final phase Bergsonian metaphysics is even more unmistakably monistic. At the outset Bergson talked as if the flow which I intuit in my own experience is only one instance of becoming among many others (see p. 77). This raises the question, which is not clearly answered, as to whether one can directly intuit other instances of becoming, or whether one simply infers that everything else exhibits the same basic character as one's own experience. But in *Creative Evolution*, and even more clearly in *Two Sources*, the *élan vital* is presented as a unitary process which underlies everything whatsoever. In intuiting the flow of one's own experience, one is encountering this reality; one could only speak of different instances of becoming as aspects or fragments of this fundamental reality.

Bergson gained, and lost, an enormous reputation during his lifetime. *Creative Evolution* made him world famous. The ecstatic words in which James in a letter to the author hailed the publication of the book were typical of its reception in many quarters.

O my Bergson, you are a magician, and your book is a marvel, a real wonder in the history of philosophy, making, if I mistake not, an entirely new era in respect of matter, but unlike the works of genius of the "transcendentalist" movement (which are so obscurely and abominably and inaccessibly written), a pure classic in point of form. And if your next book proves to be as great an advance on this one as this on its two predecessors, your name will surely go down as one of the great creative names in philosophy.

It appealed to readers of many sorts: religious liberals who saw the possibility of a metaphysical basis for a religion oriented to progress and develop

ment; men concerned with the arts who saw new light shed on creative activity; social thinkers like Sorel who saw in Bergson's philosophy a support for revolution as contrasted with gradual parliamentary reform; men from many quarters who welcomed a fresh alternative to the rigidities of nineteenth-century materialism; and finally anyone who is amenable to seduction by a lively imagination joined with analytical acuity and expressed in iridescent prose. Books dealing with Bergson appeared on all sides. But by 1932, when *Two Sources* appeared, the main currents of thought had turned in other directions. No school or movement has come out of Bergson's work; virtually no disciples have carried on in his spirit. Philosophy, in France as elsewhere, deals with other themes in other ways. In 1959 the American Philosophical Association paid considerable attention to the centenary of John Dewey, of the publication of *The Origin of Species*, and even to Samuel Alexander, but Bergson was virtually ignored. And yet Bergson's impact is none the less significant for that. He represented, and helped to crystallize, some of the main themes of twentieth-century philosophy, themes which the reader of this volume will encounter repeatedly—anti-intellectualism (or at least anti-what has passed for the intellect and its categories), concentration on process as fundamental, evolution as revelatory of man's status in the world, the central importance of immediate experience for philosophy. And Bergson has given us a modern statement of mysticism, a philosophy that will probably always be one of the major philosophical alternatives.

W. P. A.

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Introduction to Metaphysics

by HENRI BERGSON

If we compare the various ways of defining metaphysics and of conceiving the absolute, we shall find, despite apparent discrepancies, that philosophers agree in making a deep distinction between two ways of knowing a thing. The first implies going all around it, the second entering into it. The first depends on the viewpoint chosen and the symbols employed, while the second is taken from no viewpoint and rests on no symbol. Of the first kind of knowledge we shall say that it stops at the *relative*; of the second that, wherever possible, it attains the *absolute*.

Take, for example, the movement of an object in space. I perceive it differently according to the point of view from which I look at it, whether from that of mobility or of immobility. I express it differently, furthermore, as I relate it to the system of axes or reference points, that is to say, according to the symbols by which I translate it. And I call it *relative* for this double reason: in either case, I place myself outside the object itself. When I speak of an absolute movement, it means that I attribute to the mobile an inner being and, as it were, states of soul; it also means that I am in harmony with these states and enter into them by an effort of imagination. Therefore, according to whether the object is mobile or immobile, whether it adopts one movement or another, I shall not have the same feeling about it. And what I feel will depend neither on the point of view I adopt toward the object, since I am in the object itself, nor on the symbols by which I translate it, since I have renounced all translation in order to possess the original. In short, the movement will not be grasped from without and, as it were, from where I am, but from within, inside it, in what it is in itself. I shall have hold of an absolute.

Or again, take a character whose adventures make up the subject of a novel. The novelist may multiply traits of character, make his hero speak and act as much as he likes: all this has not the same value as the simple and indivisible feeling I should experience if I were to coincide for a single moment with the personage himself. The actions, gestures and words would then appear to flow naturally, as though from their source. They would no longer be accidents making up the idea I had of the character, constantly enriching this idea without ever succeeding in completing it. The character

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would be given to me all at once in its entirety, and the thousand and one incidents which make it manifest, instead of adding to the idea and enriching it, would, on the contrary, seem to me to fall away from it without in any way exhausting or impoverishing its essence. I get a different point of view regarding the person with every added detail I am given. All the traits which describe it to me, yet which can only enable me to know it by comparisons with persons or things I already know, are signs by which it is more or less symbolically expressed. Symbols and points of view then place me outside it; they give me only what it has in common with others and what does not belong properly to it. But what is properly itself, what constitutes its essence, cannot be perceived from without, being internal by definition, nor be expressed by symbols, being incommensurable with everything else. Description, history and analysis in this case leave me in the relative. Only by coinciding with the person itself would I possess the absolute.

It is in this sense, and in this sense alone, that *absolute* is synonymous with *perfection*. Though all the photographs of a city taken from all possible points of view indefinitely complete one another, they will never equal in value that dimensional object, the city along whose streets one walks. All the translations of a poem in all possible languages may add nuance to nuance and, by a kind of mutual retouching, by correcting one another, may give an increasingly faithful picture of the poem they translate, yet they will never give the inner meaning of the original. A representation taken from a certain point of view, a translation made with certain symbols still remain imperfect in comparison with the object whose picture has been taken or which the symbols seek to express. But the absolute is perfect in that it is perfectly what it is.

It is probably for the same reason that the *absolute* and the *infinite* are often taken as identical. If I wish to explain to someone who does not know Greek the simple impression that a line of Homer leaves upon me, I shall give the translation of the line, then comment on my translation, then I shall develop my commentary, and from explanation to explanation I shall get closer to what I wish to express; but I shall never quite reach it. When you lift your arm you accomplish a movement the simple perception of which you have inwardly; but outwardly, for me, the person who sees it, your arm passes through one point, then through another, and between these two points there will be still other points, so that if I begin to count them, the operation will continue indefinitely. Seen from within, an absolute is then a simple thing; but considered from without, that is to say relative to something else, it becomes, with relation to those signs which express it, the piece of gold for which one can never make up the change. Now what lends itself at the same time to an indivisible apprehension and to an inexhaustible enumeration is, by definition, an infinite.

It follows that an absolute can only be given in an *intuition*, while all the rest has to do with *analysis*. We call intuition here the *sympathy* by which

one is transported into the interior of an object in order to coincide with what there is unique and consequently inexpressible in it. Analysis, on the contrary, is the operation which reduces the object to elements already known, that is, common to that object and to others. Analyzing then consists in expressing a thing in terms of what is not it. All analysis is thus a translation, a development into symbols, a representation taken from successive points of view from which are noted a corresponding number of contacts between the new object under consideration and others believed to be already known. In its eternally unsatisfied desire to embrace the object around which it is condemned to turn, analysis multiplies endlessly the points of view in order to complete the ever incomplete representation, varies interminably the symbols with the hope of perfecting the always imperfect translation. It is analysis ad infinitum. But intuition, if it is possible, is a simple act.

This being granted, it would be easy to see that for positive science analysis is its habitual function. It works above all with symbols. Even the most concrete of the sciences of nature, the sciences of life, confine themselves to the visible form of living beings, their organs, their anatomical elements. They compare these forms with one another, reduce the more complex to the more simple, in fact they study the functioning of life in what is, so to speak, its visual symbol. If there exists a means of possessing a reality absolutely, instead of knowing it relatively, of placing oneself within it instead of adopting points of view toward it, of having the intuition of it instead of making the analysis of it, in short, of grasping it over and above all expression, translation or symbolical representation, metaphysics is that very means. *Metaphysics is therefore the science which claims to dispense with symbols.*

There is at least one reality which we all seize from within, by intuition and not by simple analysis. It is our own person in its flowing through time, the self which endures. With no other thing can we sympathize intellectually or, if you like, spiritually. But one thing is sure: we sympathize with ourselves.

When, with the inner regard of my consciousness, I examine my person in its passivity, like some superficial encrustment, first I perceive all the perceptions which come to it from the material world. These perceptions are clear-cut, distinct, juxtaposed or mutually juxtaposable; they seek to group themselves into objects. Next I perceive memories more or less adherent to these perceptions and which serve to interpret them; these memories are, so to speak, as if detached from the depth of my person and drawn to the periphery by perceptions resembling them; they are fastened on me without being absolutely myself. And finally, I become aware of tendencies, motor habits, a crowd of virtual actions more or less solidly bound to those perceptions and these memories. All these elements with their well-defined

forms appear to me to be all the more distinct from myself the more they are distinct from one another. Turned outwards from within, together they constitute the surface of a sphere which tends to expand and lose itself in the external world. But if I pull myself in from the periphery toward the centre, if I seek deep down within me what is the most uniformly, the most constantly and durably myself, I find something altogether different.

What I find beneath these clear-cut crystals and this superficial congelation is a continuity of flow comparable to no other flowing I have ever seen. It is a succession of states each one of which announces what follows and contains what precedes. Strictly speaking they do not constitute multiple states until I have already got beyond them, and turn around to observe their trail. While I was experiencing them they were so solidly organized, so profoundly animated with a common life, that I could never have said where any one of them finished or the next one began. In reality, none of them do begin or end; they all dove-tail into one another.

It is, if you like, the unrolling of a spool, for there is no living being who does not feel himself coming little by little to the end of his span; and living consists in growing old. But it is just as much a continual winding, like that of thread into a ball, for our past follows us, becoming larger and larger with the present it picks up on its way; and consciousness means memory.

To tell the truth, it is neither a winding nor an unwinding, for these two images evoke the representation of lines or surfaces whose parts are homogeneous to and superposable on one another. Now, no two moments are identical in a conscious being. Take, for example, the simplest feeling, suppose it to be constant, absorb the whole personality in it: the consciousness which will accompany this feeling will not be able to remain identical with itself for two consecutive moments, since the following moment always contains, over and above the preceding one, the memory the latter has left it. A consciousness which had two identical moments would be a consciousness without memory. It would therefore die and be re-born continually. How otherwise can unconsciousness be described?

We must therefore evoke a spectrum of a thousand shades, with imperceptible gradations leading from one shade to another. A current of feeling running through the spectrum, becoming tinted with each of these shades in turn, would suffer gradual changes, each of which would announce the following and sum up within itself the preceding ones. Even then the successive shades of the spectrum will always remain external to each other. They are juxtaposed. They occupy space. On the contrary, what is pure duration excludes all idea of juxtaposition, reciprocal exteriority and extension.

Instead, let us imagine an infinitely small piece of elastic, contracted, if that were possible, to a mathematical point. Let us draw it out gradually in such a way as to bring out of the point a line which will grow progressively

longer. Let us fix our attention not on the line as line, but on the action which traces it. Let us consider that this action, in spite of its duration, is indivisible if one supposes that it goes on without stopping; that, if we intercalate a stop in it, we make two actions of it instead of one and that each of these actions will then be the indivisible of which we speak; that it is not the moving act itself which is never indivisible, but the motionless line it lays down beneath it like a track in space. Let us take our mind off the space subtending the movement and concentrate solely on the movement itself, on the act of tension or extension, in short, on pure mobility. This time we shall have a more exact image of our development in duration.

And yet that image will still be incomplete, and all comparison furthermore will be inadequate, because the unrolling of our duration in certain aspects resembles the unity of a movement which progresses, in others, a multiplicity of states spreading out, and because no metaphor can express one of the two aspects without sacrificing the other. If I evoke a spectrum of a thousand shades, I have before me a complete thing, whereas duration is the state of completing itself. If I think of an elastic being stretched, of a spring being wound or unwound, I forget the wealth of coloring characteristic of duration as something lived and see only the simple movement by which consciousness goes from one shade to the other. The inner life is all that at once, variety of qualities, continuity of progress, unity of direction. It cannot be represented by images.

But still less could it be represented by *concepts*, that is, by abstract ideas, whether general or simple. Doubtless no image will quite answer to the original feeling I have of the flowing of myself. But neither is it necessary for me to try to express it. To him who is not capable of giving himself the intuition of the duration constitutive of his being, nothing will ever give it, neither concepts nor images. In this regard, the philosopher's sole aim should be to start up a certain effort which the utilitarian habits of mind of everyday life tend, in most men, to discourage. Now the image has at least the advantage of keeping us in the concrete. No image will replace the intuition of duration, but many different images, taken from quite different orders of things, will be able, through the convergence of their action, to direct the consciousness to the precise point where there is a certain intuition to seize on. By choosing images as dissimilar as possible, any one of them will be prevented from usurping the place of the intuition it is instructed to call forth, since it would then be driven out immediately by its rivals. By seeing that in spite of their differences in aspect they all demand of our mind the same kind of attention and, as it were, the same degree of tension, one will gradually accustom the consciousness to a particular and definitely determined disposition, precisely the one it will have to adopt in order to appear unveiled to itself. But even then the consciousness must acquiesce in this effort; for we shall have shown it nothing. We shall simply have placed it in the attitude it must take to produce the desired effort and,

by itself, to arrive at the intuition. On the other hand the disadvantage of too simple concepts is that they are really symbols which take the place of the object they symbolize and which do not demand any effort on our part. Upon close examination one would see that each of them retains of the object only what is common to that object and to others. Each of them is seen to express, even more than does the image, a *comparison* between the object and those objects resembling it. But as the comparison has brought out a resemblance, and as the resemblance is a property of the object, and as a property seems very much as though it were a *part* of the object possessing it, we are easily persuaded that by juxtaposing concepts to concepts we shall recompose the whole of the object with its parts and obtain from it, so to speak, an intellectual equivalent. We shall in this way think we are forming a faithful representation of duration by lining up the concepts of unity, multiplicity, continuity, finite or infinite divisibility, etc. That is precisely the illusion. And that, also, is the danger. In so far as abstract ideas can render service to analysis, that is, to a scientific study of the object in its relations with all others, to that very extent are they incapable of replacing intuition, that is to say, the metaphysical investigation of the object in what essentially belongs to it. On the one hand, indeed, these concepts placed end to end will never give us anything more than an artificial recomposition of the object of which they can symbolize only certain general and, as it were, impersonal aspects: therefore it is vain to believe that through them one can grasp a reality when all they present is its shadow. But on the other hand, alongside the illusion, there is also a very grave danger. For the concept generalizes at the same time that it abstracts. The concept can symbolize a particular property only by making it common to an infinity of things. Therefore it always more or less distorts this property by the extension it gives to it. A property put back into the metaphysical object to which it belongs coincides with the object, at least moulds itself on it, adopting the same contours. Extracted from the metaphysical object and represented in a concept, it extends itself indefinitely, surpassing the object since it must henceforth contain it along with others. The various concepts we form of the properties of a thing are so many much larger circles drawn round it, not one of which fits it exactly. And yet, in the thing itself, the properties coincided with it and therefore with each other. We have no alternative then but to resort to some artifice in order to re-establish the coincidence. We shall take any one of these concepts and with it try to rejoin the others. But the junction will be brought about in a different way, depending upon the concept we start from. According to whether we start, for example, from unity or from multiplicity, we shall form a different conception of the multiple unity of duration. Everything will depend on the weight we assign to this or that concept, and this weight will always be arbitrary, since the concept, extracted from the object, has no weight, being nothing more than the shadow of a body. Thus a multiplicity of different *systems* will arise, as many sys-

tems as there are external viewpoints on the reality one is examining or as there are larger circles in which to enclose it. The simple concepts, therefore, not only have the disadvantage of dividing the concrete unity of the object into so many symbolical expressions; they also divide philosophy into distinct schools, each of which reserves its place, chooses its chips, and begins with the others a game that will never end. Either metaphysics is only this game of ideas, or else, if it is a serious occupation of the mind, it must transcend concepts to arrive at intuition. To be sure, concepts are indispensable to it, for all the other sciences ordinarily work with concepts, and metaphysics cannot get along without the other sciences. But it is strictly itself only when it goes beyond the concept, or at least when it frees itself of the inflexible and ready-made concepts and creates others very different from those we usually handle, I mean flexible, mobile, almost fluid representations, always ready to mould themselves on the fleeting forms of intuition. I shall come back to this important point a little later. It is enough for us to have shown that our duration can be presented to us directly in an intuition, that it can be suggested indirectly to us by images, but that it cannot—if we give to the word *concept* its proper meaning—be enclosed in a conceptual representation.

Let us for an instant try to break it up into parts. We must add that the terms of these parts, instead of being distinguished like those of any multiplicity, encroach upon one another; that we can, no doubt, by an effort of imagination, solidify this duration once it has passed by, divide it into pieces set side by side and count all the pieces; but that this operation is achieved on the fixed memory of the duration, on the immobile track the mobility of the duration leaves behind it, not on the duration itself. Let us therefore admit that, if there is a multiplicity here, this multiplicity resembles no other. Shall we say then that this duration has unity? Undoubtedly a continuity of elements prolonged into one another partakes of unity as much as it does of multiplicity, but this moving, changing, colored and living unity scarcely resembles the abstract unity, empty and motionless, which the concept of pure unity circumscribes. Are we to conclude from this that duration must be defined by both unity and multiplicity at the same time? But curiously enough, no matter how I manipulate the two concepts, apportion them, combine them in various ways, practice on them the most delicate operations of mental chemistry, I shall never obtain anything which resembles the simple intuition I have of duration; instead of which, if I place myself back in duration by an effort of intuition, I perceive immediately how it is unity, multiplicity and many other things besides. These various concepts were therefore just so many external points of view on duration. Neither separated nor re-united have they made us penetrate duration itself.

We penetrate it, nevertheless, and the only way possible is by an intuition. In this sense, an absolute internal knowledge of the duration of the self by the self is possible. But if metaphysics demands and can obtain here

an intuition, science has no less need of an analysis. And it is because of a confusion between the roles of analysis and intuition that the dissensions between schools of thought and the conflicts between systems will arise.

Psychology, in fact, like the other sciences, proceeds by analysis. It resolves the self, first given to it in the form of a simple intuition, into sensations, feelings, images, etc., which it studies separately. It therefore substitutes for the self a series of elements which are the psychological facts. But these *elements*, are they *parts*? That is the whole question, and it is because we have evaded it that we have often stated in insoluble terms the problem of the human personality.

It is undeniable that any psychological state, by the sole fact that it belongs to a person, reflects the whole of a personality. There is no feeling, no matter how simple, which does not virtually contain the past and present of the being which experiences it, which can be separated from it and constitute a "state," other than by an effort of abstraction or analysis. But it is no less undeniable that without this effort of abstraction or analysis there would be no possible development of psychological science. Now, of what does the operation consist by which the psychologist detaches a psychological state in order to set it up as a more or less independent entity? He begins by disregarding the person's special coloration, which can be expressed only in common and known terms. He then strives to isolate, in the person thus already simplified, this or that aspect which lends itself to an interesting study. If, for example, it is a question of inclination, he will leave out of account the inexpressible shading which colors it and which brings it about that my inclination is not yours; he will then fix his attention on the movement by which our personality tends towards a certain object; he will isolate this attitude, and it is this special aspect of the person, this point of view on the mobility of the inner life, this "schema" of the concrete inclination which he will set up as an independent fact. In this there is a work analogous to that of an artist who, on a visit to Paris, would, for example, make a sketch of a tower of Notre Dame. The tower is an inseparable part of the edifice, which is no less inseparably a part of the soil, the surroundings, the whole of Paris, etc. He must begin by detaching it; he will focus only on a certain aspect of the whole, and that aspect is this tower of Notre Dame. Now the tower is in reality constituted of stones whose particular grouping is what gives it its form; but the sketcher is not interested in the stones, he only notices the silhouette of the tower. He substitutes for the real and internal organization of the thing an external and schematic reconstitution. So that his design corresponds, in short, to a certain point of view of the object and to the choice of a certain mode of representation. Now the same holds for the operation by which the psychologist extracts a psychological state from the whole person. This isolated psychological state is scarcely more than a sketch, the beginning of an artificial recomposition; it is the whole envisaged under a certain elementary aspect in which one has become especially interested

and which one has taken care to note. It is not a part, but an element. It has not been obtained by fragmentation, but by analysis.

Now at the bottom of all the sketches made in Paris the stranger will probably write "Paris" by way of reminder. And as he has really seen Paris, he will be able, by descending from the original intuition of the whole, to place his sketches in it and thus arrange them in relation to one another. But there is no way of performing the opposite operation; even with an infinity of sketches as exact as you like, even with the word "Paris" to indicate that they must bear close connection, it is impossible to travel back to an intuition one has not had, and gain the impression of Paris if one has never seen Paris. The point is that we are not dealing here with parts of the whole, but with *notes* taken on the thing as a whole. To choose a more striking example, where the notation is more completely symbolical, let us suppose someone puts before me, all jumbled together, the letters which go to make up a poem, without my knowing which poem it is. If the letters were *parts* of the poem, I could attempt to reconstruct it with them by trying various possible arrangements, as a child does with the pieces of a jigsaw puzzle. But I shall not for an instant think of attempting it, because the letters are not *component parts*, but *partial expressions*, which is quite another thing. That is why, if I know the poem, I put each one of the letters in its proper place and link them together without difficulty in one continuous chain, while the reverse operation is impossible. Even when I take it into my head to try that reverse operation, even when I place the letters end to end, I begin by imagining a plausible meaning: I thus give myself an intuition, and it is from the intuition that I try to fall back on the elementary symbols which would re-create its expression. The very notion of reconstructing the thing by carrying out operations on symbolical elements alone implies such an absurdity that it would never occur to anyone if it were realized that he was not dealing with fragments of the thing, but in some sort with fragments of symbol.

That, however, is what philosophers undertake to do when they seek to recompose the person with psychological states, whether they confine themselves to these states or whether they add a thread for the purpose of tying the states to one another. Empiricists and rationalists alike are in this case dupes of the same illusion. Both take the *partial notions* for *real parts*, thus confusing the point of view of analysis and that of intuition, science and metaphysics.

The empiricists are right in saying that psychological analysis does not uncover in the person anything more than psychological states. And such is in fact the function, such is the very definition of analysis. The psychologist has nothing else to do but analyze the person, that is, take note of the states: at most he will place the rubric "Ego" on these states in saying that they are "states of ego," just as the sketcher writes the word "Paris" on each of his sketches. Within the sphere in which the psychologist places himself

and where he should place himself, the "Ego" is only a sign by which one recalls the primitive intuition (a very vague one at that) which furnished psychology with its object: it is only a word, and the great mistake is to think that one could, by staying in the same sphere, find a thing behind the word. That has been the mistake of those philosophers who have not been able to resign themselves to being simply psychologists in psychology, Taine and Stuart Mill, for example. Psychologists by the method they apply, they have remained metaphysicians by the object they have in view. Looking for an intuition, through a strange inconsistency they seek to get this intuition from its very negation, analysis. They are seeking the self (*le moi*), and claim to find it in the psychological states, even though it has been possible to obtain that diversity of psychological states only by transporting oneself outside of the self and taking a series of sketches of the person, a series of notes, of more or less schematic and symbolic representations. And so although they place states side by side with states, multiply their contacts, explore their intervening spaces, the self always escapes them, so that in the end they see nothing more in it than an empty phantom. One might just as well deny that the *Iliad* has a meaning, on the plea that one has looked in vain for this meaning in the spaces between the letters which go to make it up.

Philosophical empiricism, then, is here born of a confusion between the point of view of intuition and that of analysis. It consists in seeking the original in the translation where it naturally cannot be, and in denying the original on the plea that one does not find it in the translation. It necessarily ends in negations; but looking at it more closely, one perceives that these negations signify simply that analysis is not intuition, and this is self-evident. From the original and furthermore vague intuition which furnishes science with its object, science passes immediately to analysis, which multiplies indefinitely the points of view of that object. It is quickly persuaded that, by putting all the points of view together, it could reconstitute the object. Is it any wonder that, like the child who seeks to make a solid plaything of the shadows silhouetted along the wall, it too sees the object fleeing before it?

But rationalism is the dupe of the same illusion. It starts from the confusion empiricism made, and remains as powerless to reach the personality. Like empiricism, it takes the psychological states to be so many *fragments*, detached from an ego which supposedly holds them together. Like empiricism, it tries to bind these fragments to one another in order to reconstitute the unity of the person. Like empiricism, in short, it sees the unity of the person elude its grasp like a phantom each time it tries to lay hold of it. But while empiricism, tired of the struggle, in the end declares that there is nothing else than the multiplicity of psychological states, rationalism persists in affirming the unity of the person. It is true that, seeking this unity in the psychological states themselves, yet being obliged to put to the account of psychological states all the qualities or determinations it finds by analysis

(since analysis, by definition, always ends in states), it is true that it has nothing left for the unity of the person but something purely negative, the absence of all determination. The psychological states having necessarily taken and kept for themselves in this analysis all that gives the slightest appearance of materiality, the "unity of the self" can be nothing more than a form without matter. It will be the absolute indeterminate and the absolute void. To the detached psychological states, to those shadows of the self the totality of which was, for the empiricists, the equivalent of the person, rationalism, to reconstitute the personality, adds something still more unreal, the vacuum in which these shadows move, one might say, the *locus* of the shadows. How could that "form," which is really formless, characterize a living, acting, concrete personality and distinguish Peter from Paul? Is it surprising that the philosophers who have isolated this "form" of the personality then find it powerless to determine a person, and that they are led by degrees to make of their empty Ego a bottomless receptacle which no more belongs to Paul than to Peter, and in which there will be place, as one sees fit, for the whole of humanity, or for God, or for existence in general? I see here between empiricism and rationalism this sole difference, that the first, seeking the unity of the self in the interstices, so to speak, of psychological states, is led to fill up these crannies with other states, and so on indefinitely, so that the self, confined in an interval which is continually contracting, tends towards Zero the further one pushes analysis; while rationalism, making the self the place where the states are lodged, is in the presence of an empty space that one has no more reason to limit here rather than there, which goes beyond each one of the succeeding limits we undertake to assign to it, which goes on expanding and tends to be lost, not in Zero this time, but in the Infinite.

Considerably less than is supposed, therefore, is the distance between a so-called "empiricism" like Taine's and the most transcendent speculations of certain German Pantheists. The method is analogous in the two cases: it consists in reasoning on the *elements* of the translation as though they were parts of the original. But a true empiricism is the one which purposes to keep as close to the original itself as possible, to probe more deeply into its life, and by a kind of spiritual *auscultation*, to feel its soul palpitate; and this true empiricism is the real metaphysics. The work is one of extreme difficulty, because not one of the ready-made conceptions that thought uses for its daily operations can be of any use here. Nothing is easier than to say that the ego is multiplicity, or that it is unity, or that it is the synthesis of both! Here unity and multiplicity are representations one need not cut according to the object, that one finds already made and that one has only to choose from the pile—ready-made garments which will suit Peter as well as Paul because they do not show off the figure of either of them. But an empiricism worthy of the name, an empiricism which works only according to measure, sees itself obliged to make an absolutely new effort for each new object it

studies. It cuts for the object a concept appropriate to the object alone, a concept one can barely say is still a concept, since it applies only to that one thing. This empiricism does not proceed by combining ideas one already finds in stock, unity and multiplicity, for example; but the representation to which it leads us is, on the contrary, a simple, unique representation; and once it is formed one readily understands why it can be put into the frames unity, multiplicity, etc., all of which are much larger than itself. Finally, philosophy thus defined does not consist in choosing between concepts and taking sides with one school, but in seeking a unique intuition from which one can just as easily come down again to the various concepts, because one has placed oneself above the divisions of the schools.

That the personality has unity is certain; but such an affirmation does not teach me anything about the extraordinary nature of this unity which is the person. That our self is multiple I further agree, but there is in it a multiplicity which, it must be recognized, has nothing in common with any other. What really matters to philosophy is to know *what* unity, *what* multiplicity, *what* reality superior to the abstract one and the abstract multiple is the multiple unity of the person. And it will know this only if it once again grasps the simple intuition of the self by the self. Then, according to the slope it chooses to come down from the summit, it will arrive at unity or multiplicity or any one of the concepts by which we try to define the moving life of the person. But no mixing of these concepts among themselves, I repeat, would give anything resembling the person which endures.

If you put a solid cone before me, I see without difficulty how it narrows toward the peak and tends to become a mathematical point, how it also grows larger at its base into an indefinitely increasing circle. But neither the point nor the circle nor the juxtaposition of the two on a plane will give me the slightest idea of a cone. It is the same for the multiplicity and unity of the psychological life; the same for the Zero and the Infinite towards which empiricism and rationalism direct the personality.

These concepts, as we shall show elsewhere, ordinarily go by pairs and represent the two opposites. There is scarcely any concrete reality upon which one cannot take two opposing views at the same time and which is consequently not subsumed under the two antagonistic concepts. Hence a thesis and an antithesis that it would be vain for us to try logically to reconcile, for the simple reason that never, with concepts or points of view, will you make a thing. But from the object, seized by intuition, one passes without difficulty in a good many cases to the two contrary concepts, and because thesis and antithesis are seen to emerge from the reality, one grasps at the same time how this thesis and antithesis are opposed and how they are reconciled.

It is true that in order to do that one must institute a reversal of the habitual work of the intelligence. To think consists ordinarily in going from concepts to things, and not from things to concepts. To know a reality in the

ordinary meaning of the word "to know," is to take ready-made concepts, apportion them, and combine them until one obtains a practical equivalent of the real. But it must not be forgotten that the normal work of the intelligence is far from being a disinterested work. We do not, in general, aim at knowing for the sake of knowing, but at knowing in order to take a stand, gain a profit, in fact to satisfy an interest. We try to find out up to what point the object to be known is *this* or *that*, into what known genus it fits, what kind of action, step or attitude it should suggest to us. These various possible actions and attitudes are so many *conceptual directions* of our thought, determined once and for all; nothing remains but for us to follow them; precisely in that consists the application of concepts to things. To try a concept on an object is to ask of the object what we have to do with it, what it can do for us. To label an object with a concept is to tell in precise terms the kind of action or attitude the object is to suggest to us. All knowledge properly so-called is, therefore, turned in a certain direction or taken from a certain point of view. It is true that our interest is often complex. And that is why we sometimes manage to turn our knowledge of the same object in several successive directions and to cause view-points concerning it to vary. This is what, in the ordinary meaning of these terms, a "wide" and "comprehensive" knowledge of the object consists in: the object, then, is led back, not to a unique concept, but to several concepts in which it is deemed to "participate." How it is to participate in all these concepts at once is a question of no practical importance and one that need not be asked. It is, therefore, natural and legitimate that we proceed by juxtaposition and apportioning of concepts in every-day life: no philosophical difficulties will be born of this since, by tacit consent, we shall abstain from philosophizing. But to transfer this *modus operandi* to philosophy, to go—here again—from concepts to the thing, to employ for the disinterested knowledge of an object one now aims at attaining in itself, a manner of knowing inspired by a definite interest and consisting by definition in a view taken of the object externally, is to turn one's back on the goal at which one was aiming; it is to condemn philosophy to an eternal friction between the schools and set up a contradiction in the very heart of the object and the method. Either there is no philosophy possible and all knowledge of things is a practical knowledge turned to the profit to be gained from them, or philosophizing consists in placing oneself within the object itself by an effort of intuition.

But in order to comprehend the nature of this intuition, to determine precisely where intuition ends and analysis begins, we must return to what was said above concerning the flow of duration.

It is to be observed that the concepts or schemas, to which analysis leads, have the essential characteristic of being immobile while under consideration. I have isolated from the whole of the inner life that psychological entity which I call a simple sensation. So long as I study it I suppose it to remain what it is. If I were to find some change in it, I should say that it was not a

single sensation, but several successive sensations; and it is to each one of the succeeding sensations that I should then transfer the immutability at first attributed to the whole sensation. In any case I shall, by carrying analysis far enough, be able to arrive at elements I shall hold to be immovable. It is there, and there only, that I shall find the solid base of operations which science needs for its proper development.

There is no mood, however, no matter how simple, which does not change at every instant, since there is no consciousness without memory, no continuation of a state without the addition, to the present feeling, of the memory of past moments. That is what duration consists of. Inner duration is the continuous life of a memory which prolongs the past into the present, whether the present distinctly contains the ever-growing image of the past, or whether, by its continual changing of quality, it attests rather the increasingly heavy burden dragged along behind one the older one grows. Without that survival of the past in the present there would be no duration but only instantaneity.

It is true that if I am criticized for abstracting the psychological state from duration by the mere fact of analyzing it, I shall defend myself against the charge by saying that each of these elementary psychological states to which my analysis leads is a state which still occupies time. "My analysis," I shall say, "easily resolves the inner life into states each of which is homogeneous to itself; only, since the homogeneity spreads out over a definite number of minutes or seconds, the elementary psychological state does not cease to have duration, though it does not change."

But who does not see that the definite number of minutes and seconds I attribute to the elementary psychological state has no more than the value of an indication meant to remind me that the psychological state, supposedly homogeneous, is in reality a state which changes and endures? The state, taken in itself, is a perpetual becoming. I have extracted from this becoming a certain mean of quality which I have supposed invariable: I have thus constituted a state which is stable, and by that very fact, schematic. Again, I have extracted becoming in general, the becoming that would no more be the becoming of this than of that, and this is what I have called the *time* this state occupies. Were I to examine it closely, I should see that this abstract time is as immobile for me as the state I localize in it, that it could flow only by a continual changing of quality and that, if it is without quality, a simple theatre of change, it thus becomes an immobile milieu. I should see that the hypothesis of this homogeneous time is simply meant to facilitate the comparison between the various concrete durations, to permit us to count simultaneities and to measure one flowing of duration in relation to another. And finally, I should understand that in fastening to the representation of an elementary psychological state the indication of a definite number of minutes and seconds, I am merely recalling that the state has been detached from an ego which endures, and demarcating the place where it

would have to be set in motion again in order to bring it, from the simple schema it has become, back to the concrete form it had at first. But I forget all that, having no use for it in analysis.

That is to say, analysis operates on immobility, while intuition is located in mobility or, what amounts to the same thing, in duration. That is the very clear line of demarcation between intuition and analysis. One recognizes the real, the actual, the concrete, by the fact that it is variability itself. One recognizes the element by the fact that it is invariable. And it is invariable by definition, being a schema, a simplified reconstruction, often a mere symbol, in any case, a view taken of the reality that flows.

But the mistake is to believe that with these schemas one could recompose the real. It cannot be too often repeated: from intuition one can pass on to analysis, but not from analysis to intuition.

With variability I shall make as many variations, as many qualities or modifications as I like, because they are so many immobile views taken by analysis of the mobility given to intuition. But these modifications placed end to end will not produce anything resembling variability, because they were not parts of it but elements which is quite another thing.

Let us consider, for example, the variability nearest to homogeneity, movement in space. For the whole length of this movement I can imagine possible halts: they are what I call the positions of the mobile or the points through which the mobile passes. But with the positions, were they infinite in number, I shall not make movement. They are not parts of the movement; they are so many views taken of it; they are, we say, only halt suppositions. Never is the mobile really in any of these points; the most one can say is that it passes through them. But the passing, which is a movement, has nothing in common with a halt, which is immobility. A movement could not alight on an immobility for it would then coincide with it, which would be contradictory. The points are not *in* the movement as parts, nor even *under* the movement as places of the mobile. They are simply projected by us beneath the movement like so many places where, if it should stop, would be a mobile which by hypothesis does not stop. They are not, therefore, properly speaking, positions, but suppositions, views or mental viewpoints. How, with these points of view, could one construct a thing?

That, nevertheless, is what we try to do every time we reason about movement and also about time for which movement serves as representation. By an illusion deeply rooted in our mind, and because we cannot keep from considering analysis as equivalent to intuition, we begin by distinguishing, for the whole length of the movement, a certain number of possible halts or points which, willy-nilly, we make parts of the movement. Faced with our inability to recompose movement with these points we intercalate other points, in the belief that we are thus keeping closer to what mobility there is in movement. Then, as the mobility still escapes us, we substitute for a finite and definite number of points a number "infinitely increasing"—try-

ing thus, but vainly, through the movement of our thought, which indefinitely pursues the addition of points to points, to counterfeit the real and undivided movement of the mobile. Finally, we say that movement is made up of points, but that it comprises in addition the obscure, mysterious passing from one position to the next. As though the obscurity did not come wholly from the fact that we have assumed immobility to be clearer than mobility, the halt to precede movement! As though the mystery was not due to the fact that we claim to go from halts to movement by way of composition which is impossible, whereas we pass easily from movement to slowing down and to immobility! You have sought the meaning of a poem in the form of the letters which make it up, you have thought that in considering an increasing number of letters you would finally embrace the constantly fleeting meaning, and as a last resource, seeing that it was no use to seek a part of the meaning in each letter, you have assumed that between each letter and the one following was lodged the missing fragment of the mysterious meaning! But the letters, once more, are not parts of the thing, they are the elements of the symbol. The positions of the mobile are not parts of the movement: they are points of the space which is thought to subtend the movement. This empty and immobile space, simply *conceived*, never *perceived*, has exactly the value of a symbol. By manipulating symbols, how are you going to manufacture reality?

But in this case the symbol meets the demands of our most inveterate habits of thought. We install ourselves ordinarily in immobility, where we find a basis for practice, and with it we claim to recompose mobility. We obtain thus only a clumsy imitation, a counterfeit of real movement, but this imitation is of much greater use to us in life than the intuition of the thing itself would be. Now our mind has an irresistible tendency to consider the idea it most frequently uses to be the clearest. That is why immobility seems clearer to it than mobility, the halt preceding movement.

This explains the difficulties raised by the problem of movement from earliest antiquity. They are due to the fact that we claim to go from space to movement, from the trajectory to the flight, from immobile positions to mobility, and pass from one to the other by way of composition. But it is movement which precedes immobility, and between positions and a displacement there is not the relation of parts to the whole, but that of the diversity of possible viewpoints to the real indivisibility of the object.

Many other problems are born of the same illusion. What the immobile points are to the movement of a mobile, so are the concepts of various qualities to the qualitative change of an object. The different concepts into which a variation is resolved are therefore so many stable visions of the instability of the real. And to think an object, in the usual sense of the word "think," is to take one or several of these immobile views of its mobility. It is, in short, to ask oneself from time to time just where it is, in order to know what to do with it. Nothing is more legitimate than this method of pro-

cedure, as long as it is only a question of practical knowledge of reality. Knowledge, in so far as it is directed toward the practical, has only to enumerate the possible principal attitudes of the thing in relation to us, as also our best possible attitudes in respect to it. That is the ordinary role of ready-made concepts, those stations with which we mark out the passage of the becoming. But to desire, with them, to penetrate to the innermost nature of things, is to apply to the mobility of the real a method designed to give of it immobile points of view. It is to forget that if metaphysics is possible, it can only be an effort to re-ascend the slope natural to the work of thought, to place oneself immediately, through a dilation of the mind, in the thing one is studying, in short, to go from reality to concepts and not from concepts to reality. Is it surprising that philosophers so often see the object they claim to embrace recede from them, like children trying to catch smoke by closing their fists? A good many quarrels are thus perpetuated between the schools, in which each one accuses the others of having let the real escape them.

But if metaphysics is to proceed by intuition, if intuition has as its object the mobility of duration, and if duration is psychological in essence, are we not going to shut the philosopher up in exclusive self-contemplation? Will not philosophy consist simply in watching oneself live, "as a dozing shepherd watches the running water"? To speak in this fashion would be to return to the error I have not ceased to emphasize from the very beginning of this study. It would be to fail to recognize the particular nature of duration and at the same time the essentially active character of metaphysical intuition. It would be to fail to see that only the method of which we are speaking allows one to pass beyond idealism as well as realism, to affirm the existence of objects both inferior and superior to us, though nevertheless in a certain sense inferior to us, to make them coexistent without difficulty, and progressively to dispel the obscurities that analysis accumulates around great problems. Without taking up the study of these different points here, let us confine ourselves to showing how the intuition we are discussing is not a single act but an indefinite series of acts, all doubtless of the same genus but each one of a very particular species, and how this variety of acts corresponds to the degrees of being.

If I try to *analyze* duration, that is, to resolve it into ready-made concepts, I am certainly obliged by the very nature of the concept and the analysis, to take two opposing views of *duration in general*, views with which I shall then claim to recompose it. This combination can present neither a diversity of degrees nor a variety of forms: it is or it is not. I shall say, for example, that there is, on the one hand, a *multiplicity* of successive states of consciousness and, on the other hand, a *unity* which binds them together. Duration will be the "synthesis" of this unity and multiplicity, but how this mysterious operation can admit of shades or degrees—I repeat—is not quite clear. In this hypothesis there is, there can only be, a single duration, that in which our consciousness habitually operates. To make certain of what we mean,

if we take duration under the simple aspect of a movement being accomplished in space and if we try to reduce to concepts movement considered as representative of time, we shall have on the one hand any desired number of points of the trajectory, and on the other hand an abstract unity joining them, like a thread holding together the beads of a necklace. Between this abstract multiplicity and this abstract unity their combination, once assumed to be possible, is some strange thing in which we shall find no more shadings than the addition of given numbers in arithmetic would allow. But if, instead of claiming to analyze duration (that is, in reality, to make a synthesis of it with concepts), one first installs oneself in it by an effort of intuition, one has the feeling of a certain well-defined *tension*, whose very definiteness seems like a choice between an infinity of possible durations. This being so one perceives any number of durations, all very different from one another, even though each one of them, reduced to concepts, that is to say, considered externally from two opposite points of view, is always brought back to the indefinable combination of the multiple and the one.

Let us express the same idea more precisely. If I consider duration as a multiplicity of moments bound to one another by a unity which runs through them like a thread, these moments, no matter how short the chosen duration, are unlimited in number. I can imagine them as close together as I like; there will always be, between these mathematical points, other mathematical points, and so on, *ad infinitum*. Considered from the standpoint of multiplicity, duration will therefore disappear in a dust of moments not one of which has duration, each one being instantaneous. If on the other hand I consider the unity binding the moments together, it is evident that it cannot have duration either since, by hypothesis, everything that is changing and really durable in duration has been put to the account of the multiplicity of the moments. This unity, as I examine its essence, will then appear to me as an immobile substratum of the moving reality, like some intemporal essence of time: that is what I shall call eternity—the eternity of death, since it is nothing else than movement emptied of the mobility which made up its life. Examining closely the opinions of the schools antagonistic to the subject of duration, one would see that they differ simply in attributing to one or the other of these two concepts a capital importance. Certain of them are drawn to the point of view of the multiple; they set up as concrete reality the distinct moments of a time which they have, so to speak, pulverized; they consider as being far more artificial the unity which makes a powder of these grains. The others, on the contrary, set up the unity of duration as concrete reality. They place themselves in the eternal. But as their eternity nevertheless remains abstract, being empty, as it is the eternity of a concept which by hypothesis excludes the opposite concept, one cannot see how this eternity could allow an indefinite multiplicity of moments to co-exist with it. In the first hypothesis one has a world suspended in mid-air which would have to end and begin again by itself

each instant. In the second, one has an infinitely abstract eternity of which one can say that it is especially difficult to understand why it does not remain enveloped in itself and how it allows things to co-exist with it. But in either case, and no matter which one of the two metaphysics is chosen, time appears from the psychological point of view as a mixture of two abstractions neither one of which admits of either degrees or shadings. In either system, there is only a single duration which carries everything along with it, a river without bottom and without banks and flowing without assignable force in a direction one cannot define. Even then it is a river and the river flows only because reality obtains this sacrifice from the two doctrines, taking advantage of an inadvertence in their logic. As soon as they regain possession of themselves, they congeal this flowing either into an immense solid sheet, or into an infinity of crystallized needles, but always in a *thing* which necessarily participates in the immobility of a *point of view*.

It is altogether different if one places oneself directly, by an effort of intuition, in the concrete flowing of duration. To be sure, we shall find no logical reason for positing multiple and diverse durations. Strictly speaking, there might exist no other duration than our own, as there might be no other color in the world than orange, for example. But just as a consciousness of color, which would harmonize inwardly with orange instead of perceiving it outwardly, would feel itself caught between red and yellow, would perhaps even have, beneath the latter color, a presentiment of a whole spectrum in which is naturally prolonged the continuity which goes from red to yellow, so the intuition of our duration, far from leaving us suspended in the void as pure analysis would do, puts us in contact with a whole continuity of durations which we should try to follow either downwardly or upwardly: in both cases we can dilate ourselves indefinitely by a more and more vigorous effort, in both cases transcend ourselves. In the first case, we advance toward a duration more and more scattered, whose palpitations, more rapid than ours, dividing our simple sensation, dilute its quality into quantity: at the limit would be the pure homogeneous, the pure *repetition* by which we shall define materiality. In advancing in the other direction, we go toward a duration which stretches, tightens, and becomes more and more intensified: at the limit would be eternity. This time not only conceptual eternity, which is an eternity of death, but an eternity of life. It would be a living and consequently still moving eternity where our own duration would find itself like the vibrations in light, and which would be the concretion of all duration as materiality is its dispersion. Between these two extreme limits moves intuition, and this movement is metaphysics itself.

We cannot stop here to outline the various stages of this movement. But after having presented a general view of the method and made a first application of it, it will perhaps be not without point to formulate in as

precise terms as possible the principles upon which it rests. Of the propositions I am about to set forth, most have received in the present work a beginning of proof. I hope to demonstrate them more completely when we attack other problems.

I. *There is an external reality which is given immediately to our mind.* Common sense is right on this point against the idealism and realism of the philosophers.

II. This reality is mobility. There do not exist *things* made, but only things in the making, not *states* that remain fixed, but only states in process of change. Rest is never anything but apparent, or rather, relative. The consciousness we have of our own person in its continual flowing introduces us to the interior of a reality on whose model we must imagine the others. *All reality is, therefore, tendency, if we agree to call tendency a nascent change of direction.*

III. Our mind, which seeks solid bases of operation (*point d'aperçu*), has as its principal function, in the ordinary course of life, to imagine *states* and *things*. Now and then it takes quasi-instantaneous views of the undivided mobility of the real. It thus obtains *sensations* and *ideas*. By that means it substitutes for the continuous the discontinuous, for mobility stability, for the tendency in process of change it substitutes fixed points which mark a direction of change and tendency. This substitution is necessary to common sense, to language, to practical life, and even, to a certain extent which we shall try to determine, to positive science. *Our intelligence, when it follows its natural inclination, proceeds by solid perceptions on the one hand, and by stable conceptions on the other.* It starts from the immobile and conceives and expresses movement only in terms of immobility. It places itself in ready-made concepts and tries to catch in them, as in a net, something of the passing reality. It does not do so in order to obtain an internal and metaphysical knowledge of the real. It is simply to make use of them, each concept (like each sensation) being a *practical question* which our activity asks of reality and to which reality will answer, as is proper in things, by a yes or a no. But in so doing it allows what is the very essence of the real to escape.

IV. The difficulties inherent in metaphysics, the antinomies it raises, the contradictions into which it falls, the division into opposing schools and the irreducible oppositions between systems, are due in large part to the fact that we apply to the disinterested knowledge of the real the procedures we use currently with practical utility as the aim. They are due principally to the fact that we place ourselves in the immobile to watch for the moving reality as it passes instead of putting ourselves back into the moving reality to traverse with it the immobile positions. They come from the fact that we claim to reconstitute reality, which is tendency and consequently mobility, with the percepts and concepts which have as their function to immobilize it. One will never create mobility with halts, how-

ever numerous: if one begins with mobility, one can draw from it through thought as many halts as one wishes. In other words, *it is understood that fixed concepts can be extracted by our thought from the mobile reality; but there is no means whatever of reconstituting with the fixity of concepts the mobility of the real*. Dogmatism, as the constructor of systems, has nevertheless always attempted this reconstitution.

V. It was bound to fail. This is the impotence, and this alone, pointed out by the skeptical, idealistic and critical doctrines, all those doctrines, in fact, which question our mind's ability to attain the absolute. But it does not follow from the fact that we fail to reconstitute living reality with concepts that are rigid and ready-made, that we could not grasp it in any other manner. *The demonstrations which have been given of the relativity of our knowledge are therefore tainted with an original vice: they assume, like the dogmatism they attack, that all knowledge must necessarily start from rigidly defined concepts in order to grasp by their means the flowing reality.*

VI. But the truth is that our mind is able to follow the reverse procedure. It can be installed in the mobile reality, adopt its ceaselessly changing direction, in short, grasp it intuitively. But to do that, it must do itself violence, reverse the direction of the operation by which it ordinarily thinks, continually upsetting its categories, or rather, recasting them. In so doing it will arrive at fluid concepts, capable of following reality in all its windings and of adopting the very movement of the inner life of things. Only in that way will a progressive philosophy be constituted, freed from the disputes which arise between the schools, capable of resolving problems naturally because it will be rid of the artificial terms chosen in stating them. *To philosophize means to reverse the normal direction of the workings of thought.*

VII. This reversal has never been practised in a methodical manner; but a careful study of the history of human thought would show that to it we owe the greatest accomplishments in the sciences, as well as whatever living quality there is in metaphysics. The most powerful method of investigation known to the mind, infinitesimal calculus, was born of that very reversal. Modern mathematics is precisely an effort to substitute for the *ready-made* what is in process of *becoming*, to follow the growth of magnitudes, to seize movement no longer from outside and in its manifest result, but from within and in its tendency towards change, in short, to adopt the mobile continuity of the pattern of things. It is true that it contents itself with the pattern, being but the science of magnitudes. It is also true that it has been able to realize these marvellous applications only through the invention of certain symbols, and that, if the intuition we have just mentioned is at the origin of the invention, it is the symbol alone which intervenes in the application. But metaphysics, which does not aim at any application, can and for the most part ought to abstain from converting intuition into symbol. Exempt from the obligation of arriving at results use-

ful from a practical standpoint, it will indefinitely enlarge the domain of its investigations. What it will have lost with regard to science, in utility and occurrence, it will regain in scope and range. If mathematics is only the science of magnitudes, if mathematical procedures only apply to quantities, it must not be forgotten that quantity is always nascent quality: it is, one might say, its limiting case. It is therefore natural that metaphysics should adopt the generative idea of our mathematics in order to extend it to all qualities, that is, to reality in general. In so doing, it will in no way proceed to universal mathematics, that chimera of modern philosophy. Quite the contrary, as it makes more headway, it will meet with objects less and less translatable into symbols. But it will at least have begun by making contact with the continuity and mobility of the real exactly where this contact happens to be the most utilisable. It will have looked at itself in a mirror which sends back an image of itself no doubt very reduced, but also very luminous. It will have seen with a superior clarity what mathematical procedures borrow from concrete reality, and it will continue in the direction of concrete reality, not of mathematical methods. Let us say, then, with all due qualifications to what might seem either too modest or too ambitious in this formula, that *one of the objects of metaphysics is to operate differentiations and qualitative integrations.*

VIII. What has caused this object to be lost sight of, and misled science itself about the origin of certain methods it employs, is that intuition once grasped must find a mode of expression and application which conforms to our habits of thought and which furnishes us, in well-defined concepts, the solid basis (*point d'aperçu*) we so greatly need. That is the condition of what we call strictness, precision, and indefinite extension of a general method to particular cases. Now this extension and this work of logical perfecting can be carried on for centuries, while the generative act of the method lasts only an instant. That is why we so often take the logical apparatus of science for science itself, forgetting the intuition from which the rest was able to ensue.

All that has been said by the philosophers and by scientists themselves about the "relativity" of scientific knowledge is due to forgetting this intuition. *Relative is symbolic knowledge through pre-existing concepts, which goes from the fixed to the moving, but not so intuitive knowledge which establishes itself in the moving reality and adopts the life itself of things.* This intuition attains the absolute.

Science and metaphysics then meet in intuition. A truly intuitive philosophy would realize the union so greatly desired, of metaphysics and science. At the same time that it constituted metaphysics in positive science—I mean progressive and indefinitely perfectible—it would lead the positive sciences, properly speaking, to become conscious of their true bearing, which is often very superior to what they suppose. It would put more of science into metaphysics and more of metaphysics into science. Its result would be to

re-establish the continuity between the intuitions which the various positive sciences have obtained at intervals in the course of their history, and which they have obtained only by strokes of genius.

IX. That there are not two different ways of knowing things thoroughly, that the various sciences have their roots in metaphysics, is what the philosophers of antiquity, in general, believed. Not in that lay their error. It consisted in adopting the belief so natural to the human mind, that a variation can only express and develop invariabilities. The result of this was that Action was a weakened Contemplation, duration a false, deceptive and mobile image of immobile eternity, the Soul a fall of the Idea. The whole of that philosophy which begins with Plato and ends with Plotinus is the development of a principle that we should formulate thus: "There is more in the immutable than in the moving, and one passes from the stable to the unstable by a simple diminution." Now the contrary is the truth.

Modern science dates from the day when mobility was set up as an independent reality. It dates from the day when Galileo, rolling a ball down an inclined plane, made the firm resolution to study this movement from high to low for itself, in itself, instead of seeking its principle in the concepts of the *high* and the *low*, two immobilities by which Aristotle thought he sufficiently explained its mobility. And that is not an isolated fact in the history of science. I take the view that several of the great discoveries, of those at least which have transformed the positive sciences or created new ones, have been so many soundings made in pure duration. The more living was the reality touched, the more profound had been the sounding.

But the sounding made on the sea floor brings up a fluid mass which the sun very quickly dries into solid and discontinuous grains of sand. And the intuition of duration, when exposed to the rays of the understanding, also quickly congeals into fixed, distinct and immobile concepts. In the living mobility of things, the understanding undertakes to mark out real or virtual stations, it notes arrivals and departures; that is all that is important to the thought of man in its natural exercise. But philosophy should be an effort to go beyond the human state.

On the concepts with which they have blazed the trail of intuition scholars have preferred to fix their glance. The more they considered these residua which have reached the state of symbols, the more they attributed to all science a symbolic character. And the more they believed in the symbolic character of science, the more they effected it and emphasized it. It was not long before they noticed no difference, in positive science, between the data of immediate intuition and the immense work of analysis that the understanding pursues around intuition. Thus they prepared the way for a doctrine which affirms the relativity of all our forms of knowledge.

But metaphysics has also worked toward that.

Why did the masters of modern philosophy, who were renovators of science in addition to being metaphysicians, not have the feeling of the

mobile continuity of the real? Why did they not place themselves in what we call concrete duration? They did so more than they thought, and much more than they said they did. If any attempt is made to connect by continuous links the intuitions around which systems are organized, one finds, along with several other convergent or divergent lines, a well-determined direction of thought and feeling. What is this latent thought? How is this feeling to be expressed? To borrow once more the language of the Platonists, and stripping the words of their psychological meaning, by calling Idea a certain *assurance of easy intelligibility* and Soul a certain *preoccupation* with life, we shall say that an invisible current makes modern philosophy tend to lift the Soul above the Idea. In this, as in modern science and even more so, it tends to move in the opposite direction from ancient thought.

But this metaphysics, like this science, has deployed around its inner life a rich tissue of symbols, occasionally forgetting that if science needs symbols in its analytical development, the principal justification for metaphysics is a break with symbols. Here again the understanding has pursued its work of fixing, dividing, reconstructing. True, it has pursued it under a somewhat different form. Without emphasizing a point I propose to develop elsewhere, let me confine myself to saying that the understanding, whose role is to operate on stable elements, can seek stability either in *relations* or in *things*. In so far as it works on relational concepts, it ends in *scientific* symbolism. In so far as it operates on concepts of things, it ends in *metaphysical* symbolism. But in either case the arrangement comes from it. It would willingly believe itself independent. Rather than recognizing at once what it owes to the deep intuition of reality, it is exposed to what is only seen in all its work, to an artificial arrangement of symbols. With the result that if one keeps to the letter of what metaphysicians and scholars say, as well as to the content of what they do, one might believe that the first have dug a deep tunnel under reality, while the others have thrown over it an elegant bridge, but that the moving river of things passes between these two works of art without touching them.

One of the principal tricks of Kantian criticism consisted in taking the metaphysician and the scholar at their word, in pushing metaphysics and science to the utmost possible limit of symbolism, where, in any case, they lead of their own accord the moment the understanding lays claim to an independence full of dangers. Once the relation of science and metaphysics with "intellectual intuition" is misunderstood, Kant has no difficulty in showing that our science is entirely relative and our metaphysics wholly artificial. Because he strained the independence of the understanding in both cases, because he relieved metaphysics and science of the "intellectual intuition" which gave them their inner weight, science with its relations presents to him only an outer wrapping of form, and metaphysics with its things, an outer wrapping of matter. Is it surprising, then, that the first shows him

only frameworks within frameworks, and the second phantoms pursuing phantoms?

He struck our science and metaphysics such rude blows that they have not yet entirely recovered from their shock. Our mind would willingly resign itself to see in science a wholly relative knowledge and in metaphysics an empty speculation. It seems to us even today that Kantian criticism applies to all metaphysics and to all science. In reality it applies especially to the philosophy of the ancients, as well as to the form—still ancient—that the moderns have given most often to their thought. It is valid against a metaphysics which claims to give us a *unique* and ready-made system of things, against a science which would be a *unique* system of relations, finally against a science and a metaphysics which present themselves with the architectural simplicity of the Platonic theory of Ideas, or of a Greek temple. If metaphysics claims to be made up of concepts we possessed prior to it, if it consists in an ingenious arrangement of pre-existing ideas which we utilize like the materials of construction for a building, in short, if it is something other than the constant dilation of our mind, the constantly renewed effort to go beyond our actual ideas and perhaps our simple logic as well, it is too evident that it becomes artificial like all works of pure understanding. And if science is wholly the work of analysis or of conceptual representation, if experience is only to serve as the verification of "clear ideas," if instead of starting from multiple and varied intuitions inserted into the movement proper to each reality but not always fitting into one another, it claims to be an immense mathematics, a single system of relations which imprisons the totality of the real in a mesh prepared for it, it becomes a knowledge purely relative to the human understanding.

A close reading of the *Critique of Pure Reason* will show that for Kant this kind of *universal mathematics* is science, and this barely modified Platonism, metaphysics. To tell the truth, the dream of a universal mathematics is itself only a survival of Platonism. Universal mathematics is what the world of Ideas becomes when one assumes that the Idea consists in a relation or a law, and no longer in a thing. Kant took for a reality this dream of certain modern philosophers: much more, he thought that all scientific knowledge was only a detached fragment, or rather a projecting stone of universal mathematics. The main task of the *Critique*, therefore, was to lay the foundations of this mathematics, that is, to determine what the intelligence should be and what should be the object in order that an unbroken mathematics might bind them together. And it follows that if all possible experience is thus assured of admittance into the rigid and already constituted frameworks of our understanding (unless we assume a pre-established harmony), our understanding itself organizes nature and finds itself reflected in it as in a mirror. Whence the possibility of science, which owes all its effectiveness to its relativity—and the impossibility of metaphysics, since the latter will find nothing more to do than to parody, on the

phantoms of things, the work of conceptual arrangement which science pursues seriously on relations. In short, *the whole Critique of Pure Reason leads to establishing the fact that Platonism, illegitimate if Ideas are things, becomes legitimate if Ideas are relations, and that the ready-made idea, once thus brought down from heaven to earth, is indeed, as Plato wished, the common basis of thought and nature. But the whole Critique of Pure Reason rests also upon the postulate that our thought is incapable of anything but Platonizing*, that is, of pouring the whole of possible experience into pre-existing moulds.

That is the whole question. If scientific knowledge is indeed what Kant insisted it was, there is a simple science pre-formed and even pre-formulated in nature, as Aristotle believed: from this logic immanent in things the great discoveries only illuminate point by point the line traced in advance, as, on a festival night, a string of bulbs flick on, one by one, to give the outline of a monument. And if metaphysical knowledge is indeed what Kant intended, it is reduced to the equal possibility of two opposed attitudes of mind toward all the great problems; its manifestations are so many arbitrary choices, always ephemeral, between two solutions virtually formulated from all eternity: it lives and dies from antinomies. But the truth is that neither does the science of modern times present this unilinear simplicity, nor the metaphysics of the moderns these irreducible oppositions.

Modern science is neither one nor simple. It rests, I readily agree, upon ideas one ultimately finds clear; but these ideas, when they are profound, become progressively clear by the use made of them; they owe then the best part of their luminosity to the light cast back upon them, through reflection, by the facts and applications to which they have led, the clarity of a concept being little else, accordingly, than the assurance, once it is acquired, of manipulating it to advantage. At the start, more than one of them must have appeared obscure, difficult to reconcile with the ideas already accepted by science, and bordering on the absurd. That is to say that science does not proceed by the regular nesting of concepts predestined to fit neatly inside one another. Profound and fruitful ideas are so many points of contact with currents of reality which do not necessarily converge on the same point. It is true that the concepts in which they lodge always manage somehow or other, in rounding off their corners by reciprocal friction, to makeshift among themselves.

On the other hand, the metaphysics of the moderns is not made of solutions so radical that they can lead to irreducible oppositions. This would no doubt be so if there were no means of accepting at the same time and in the same field the thesis and antithesis of the antinomies. But to philosophize consists precisely in placing oneself, by an effort of intuition, inside this concrete reality on which from the outside the *Critique* takes the two opposing views, thesis and antithesis. I shall never imagine how black and white intermingle if I have not seen grey, but I have no difficulty in under-

standing, once I have seen grey, how one can envisage it from the double viewpoints of black and white. Doctrines which have a basis of intuition escape Kantian criticism to the exact extent that they are intuitive; and these doctrines are the whole of metaphysics, provided one does not take the metaphysics congealed and dead in *theses*, but living in *philosophers*. To be sure, these divergences are striking between the schools, that is to say, in short, between the groups of disciples formed around certain of the great masters. But would one find them as clear-cut between the masters themselves? Something here dominates the diversity of systems, something, I repeat, simple and definite like a sounding of which one feels that it has more or less reached the bottom of a same ocean, even though it brings each time to the surface very different materials. It is on these materials that disciples normally work: in that is the role of analysis. And the master, in so far as he formulates, develops, translates into abstract ideas what he brings, is already, as it were, his own disciple. But the simple act which has set analysis in motion and which hides behind analysis, emanates from a faculty quite different from that of analysing. This is by very definition intuition.

Let it be said, in conclusion, that there is nothing mysterious about this faculty. Whoever has worked successfully at literary composition well knows that when the subject has been studied at great length, all the documents gathered together, all notes taken, something more is necessary to get down to the work of composition itself: an effort, often painful, immediately to place oneself in the very heart of the subject and to seek as deeply as possible an impulsion which, as soon as found, carries one forward of itself. This impulsion, once received, sets the mind off on a road where it finds both the information it had gathered and other details as well; it develops, analyzes itself in terms whose enumeration follows on without limit; the farther one goes the more is disclosed about it; never will one manage to say everything; and yet, if one turns around suddenly to seize the impulsion felt, it slips away; for it was not a thing but an urge to movement, and although indefinitely extensible, it is simplicity itself. Metaphysical intuition seems to be something of the same kind. What in this case matches the notes and documents of the literary composition is the collection of observations and experiences gathered by positive science and above all by a reflection of the mind on the mind. For one does not obtain from reality an intuition, that is to say, a spiritual harmony with its innermost quality if one has not gained its confidence by a long comradeship with its superficial manifestations. And it is not a question simply of assimilating the outstanding facts; it is necessary to accumulate and fuse such an enormous mass of them that one may be assured, in this fusion, of neutralizing by one another all the preconceived and premature ideas observers may have deposited unknowingly in their observations. Only thus does the raw material of the known facts emerge. Even in the simple and privileged case which served us as an

example, even for the direct contact of the self with the self, the definitive effort of distinct intuition would be impossible for anyone who had gathered and collated a very great number of psychological analyses. The masters of modern philosophy have been men who had assimilated all the material of the science of their time. And the partial eclipse of metaphysics since the last half century has been caused more than anything else by the extraordinary difficulty the philosopher experiences today in making contact with a science already much too scattered. But metaphysical intuition, although one can achieve it only by means of material knowledge, is an entirely different thing from the summary of synthesis of this knowledge. It is as distinct from it as the motor impulsion is distinct from the path traced by the moving object, as the tension of the spring is distinct from the visible movements in the clock. In this sense, metaphysics has nothing in common with a generalization of experience, and yet it could be defined as the whole of experience (*l'expérience intégrale*).

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JACQUES MARITAIN

1882—

Introduction

Jacques Maritain was born in Paris on November 18, 1882. As a student at the Sorbonne he was particularly interested in biology and literature as well as philosophy. While a student there he met the future companion of his physical and spiritual wanderings, Raissa Ousmanoff, a Russian Jewess whose family had recently emigrated to France. They were married in 1904. Dissatisfied with the positivistic thinking then current in their circle, the Maritains fell under the spell of Bergson but were ultimately unable to accept his depreciation of the intellect (see Part I). Finally, after many false starts, and under the influence of Leon Bloy (the "pilgrim of the absolute"), they became converted to Roman Catholicism, and were baptized on June 11, 1906. This involved a major break with the past, both for Maritain, who had been raised on liberal, anticlerical principles, and for his wife, the daughter of orthodox Jewish parents. (For a vivid account of their spiritual quest, see Raissa's volume of memoirs, *We Have Been Friends Together*.)¹ At first, Maritain supposed that he would have to abandon philosophy for faith, but when he discovered St. Thomas Aquinas, he became convinced that he had found within the Church the means for a solution to his intellectual as well as his spiritual problems. In 1912 he began teaching in Catholic institutions, and in the following years he gradually became recognized as the foremost interpreter of Thomism for the modern world.

In his writings Maritain has applied Thomist principles to every branch of philosophy from logic and ontology to the concrete concerns of art and social organization. He has always actively participated in contemporary affairs, although he has consistently refused to associate himself with any political party, in or out of France. The Maritains' villa outside Paris was a center of Catholic intellectual life in France up to 1940. In that year the Maritains were in the United States when France fell, and, refusing to cooperate in any way with the Pétain government, they remained there. Maritain taught at various American universities; since 1948 he has been Professor of Philosophy at Princeton University.

Neo-Thomism is the only major twentieth-century philosophical movement that is explicitly a revival of a past system. A Thomist is, by definition, a follower of the great thirteenth-century Catholic philosopher and theologian, St. Thomas Aquinas. Although he may differ from St. Thomas on this or that point, he feels that in its broad outlines the philosophy of St. Thomas provides an adequate framework for philosophical thinking and that further progress in philosophy is to be made within that framework. (He may or may not follow St. Thomas in theology; indeed it is not necessary that he be a Catholic, or even a Christian.) Although Aquinas was a powerful influence for several centuries after his death, his philosophy was largely neglected, even within the Church, during most of the modern period. In the late nineteenth century a return to Thomism was inaugurated and was given powerful support by Pope Leo XIII in his letter, "On the Restoration of Christian Philosophy" (1879), in which he exhorted the faithful to "restore the golden wisdom of St. Thomas . . . extend and perfect the old with new truths." Today, Thomism is presented as philosophical truth in most Roman Catholic institutions, and among professional philosophers Thomists probably outnumber the adherents of any other philosophy.

It is worth remarking that neo-Thomism occupies a position on the contemporary scene quite different from that of St. Thomas in the thirteenth century. His writings often were viewed by his contemporaries as radical and dangerous deviations from reigning philosophical orthodoxies; shortly after his death some of his views were condemned by ecclesiastical authorities in Paris and Canterbury. This was largely because, historically regarded, Thomism was an attempt to adapt Aristotelianism to the requirements of Christian thought. Almost from the beginning Christian thinking had gone on in Platonic terms, and the men who shaped the thought of the Western Christianity—Augustine, Erigena, Anselm—were steeped in the Platonic tradition. The works of Aristotle, with minor exceptions, were unavailable in western Europe prior to the twelfth century, when they began to seep in from Moslem countries, where they had long been studied. Aristotelianism then won numerous adherents, but at first it seemed impossible to reconcile this philosophy with Christian doctrine, particularly on such points as the nature of the soul and the relation of God to the world. It was Aquinas' great historical achievement to have provided the basis for such a reconciliation and thus to have laid the basis for an Aristotelian tradition in western Europe.

The main points at which the Aristotelianism of St. Thomas departed from the dominant Platonic tradition were these. (1) *Epistemology*. To the Platonic

conviction that detailed knowledge of reality can be obtained by a purely intellectual intuition, Aquinas opposed the empiricist doctrine that "nothing is in the intellect which was not previously in the senses." Man's basic contact with reality is in sense perception, and what he can learn of the world about him is ultimately derived from that. (2) This carries with it a sharp separation of reason and faith (*revelation*). Augustine and Anselm had erected no such barrier. Their motto was "faith seeking understanding." Reason, operating on the articles of faith, could convert any of these into objects of knowledge by a progressive illumination of the philosopher's mind by the light of divine wisdom. Aquinas saw clearly that many articles of Christian faith (for example, that God became man in the person of Jesus Christ) could not be established by reasoning from empirical facts. The most we can do with our own unaided powers is to show that an infinite spiritual being must be postulated to explain certain facts of observation and to establish the immateriality and immortality of the human soul. If we are ever to come to know the rest, it must be communicated to us by God and accepted solely on divine authority.

(3) *Metaphysics*. The Platonic epistemology makes a smooth fit with a metaphysics according to which true being is to be found in the eternal, intelligible models (ideal man, ideal justice, and so on) of which particular men and just actions are but fleeting, imperfect imitations. To this view Aquinas opposed the Aristotelian insistence on the primary, unqualified reality of the sensible world of particular substances in space and time. (4) *Nature of man*. For Platonism a human being is primarily an immaterial soul which is temporarily, and unhappily, lodged in a material body. But for Aquinas, following Aristotle, the human person is an essentially indissoluble unity of soul and body. The soul is the form of the body, that factor which makes it alive in all the ways in which it is alive. The soul has no being apart from its function of informing a body. (5) *Ethics*. Platonic ethics is centered around transcendent ideals and values that have their status independent of the facts of human nature. (This is not quite accurate as applied to Plato himself, but it is true of the Neo-Platonic tradition, which was Aquinas' main contact with Platonism.) Aquinas espouses an ethics that is, at least in its basis, naturalistic, in that it is based on a consideration of fundamental human needs and thinks of the good as that which would bring satisfaction of those needs.

Aquinas was able to show that in some respects Aristotle made a better Christian than Plato. The insistence on the unity of soul and body fits the traditional Christian emphasis on the resurrection of the body (as contrasted with the immortality of the soul, which is mentioned nowhere in the Christian creeds) much better than the Platonic exaltation of soul at the expense of body. And perhaps the more modest role assigned to human reason better exemplifies Christian humility vis-à-vis the divine. On the other points, the Church was eventually convinced that the Platonic position had become entrenched through long association rather than any intrinsic necessity.

Thus it would not be completely fanciful to draw a parallel between the impact of Thomism on thirteenth-century Christian thought and the impact of logical positivism on twentieth-century philosophy. Both represented a relatively tough-minded, empiricist reaction to speculative excesses. But relative to the more radical empiricisms (and irrationalisms) prevalent today, Thomism pre-

sents a very different appearance. The contemporary philosopher is more likely to notice those points at which Aquinas was at one with his Platonistic opponents—the appeal to self-evident principles at crucial stages in the argument, the conviction that the world of nature does not contain the reasons for its own existence, the willingness simply to take it for granted that the human intellect can grasp what lies beyond it, without first going through an epistemological critique of this assumption. In the face of logical positivism, pragmatism, and existentialism, Thomism is recommended as the *philosophia perennis*, the “natural philosophy of the human mind”; or, in less glowing terms, a common-sense philosophy, the view of things that comes naturally to anyone who begins to reflect on ultimate questions.

But if we compare Thomism with modern metaphysical systems—Spinoza, or Hegel, or even so recent an example as Whitehead—we may still be struck by the modesty of its aspirations. The Thomist makes no pretence of spinning out the details of the universe from a priori reflection, in the manner of Hegel, or even by extrapolation from scientific concepts, in the manner of Whitehead. What one can know about reality, apart from the empirical investigations of particular sciences, is quite meager and abstract, albeit absolutely fundamental. What one can determine by philosophical reflection is simply the fundamental features of anything that is, features that attach to it just insofar as it is. In the selection here reproduced we have Maritain’s exposition of some of these features—that everything is identical with itself, that everything has a sufficient reason for its existence, that everything that is, possesses, in a fundamental ontological sense, the attributes of truth and goodness, and so on. Not very ambitious, really. But it is the contention of the Thomist that these abstract principles provide a framework within which more detailed thinking must be carried on.

Contemporary Thomists are not content simply to present the doctrines of St. Thomas; they endeavor to restate them and adapt them to recent developments, particularly in science. Maritain and other Thomists have tried to show that the basic conceptions and assumptions of modern science fit nicely into the Thomist framework, just as Whitehead tries to show this for his philosophy, though in neither case would there be any claim that particular scientific results could be *derived* from the philosophy. There are points at which this requires considerable finesse. To exhibit these points I shall have to call attention to a respect in which the Thomistic metaphysical enterprise is not quite so limited as the above account might suggest. The metaphysical principles mentioned above, and expounded in the selection below, belong to what the Thomists call Ontology, the doctrine of being *qua* being. Ontology deals with the characteristics belonging to everything that is, whatever further features it may have, whether, for example, it is material or immaterial. But metaphysics also includes Cosmology, which is an attempt to depict the most basic features of the *cosmos*, the physical universe existing in space and time. It is with respect to his cosmology that the Thomist runs into difficulties with modern science. In St. Thomas, following Aristotle, we get a picture of the universe as made up of a plurality of substances, each of which falls naturally into one of an irreducible plurality of kinds, by virtue of which it has certain essential attributes and performs certain essential operations. To understand something most fully,

we must grasp its essential nature, and from that we can understand why it has the characteristics it has and acts in the way it does. Moreover, this essential nature is conceived teleologically; the essential operations of the substance are directed toward a more perfect realization of its nature, as the growth of an oak tree is directed to the attainment of the form of a mature oak. In Maritain's words, "Every agent acts in view of an end."

When Aristotle developed his cosmology, scientific research actually proceeded in this way, and the situation was not very different in Aquinas' day. But it is obvious that the picture presented by modern physical science is vastly different. There are no natural kinds; for different purposes we may classify things in one or another way. Whether I divide the contents of my lawn up into mowing strips, grass plants, blades of grass, organic compounds, or atoms, depends on the purpose of my consideration. Moreover, the whole tendency of modern science is reductive; it aims at exhibiting apparent sharp qualitative differences (between, for example, trees, rocks, air, and molten lava) as the manifestations of varying arrangements of a very small number of basic units (for instance, protons and electrons). And science, at any rate physical science, has no use for the notion of ends that physical things are seeking to realize. The Aristotelian physicist explained the downward movement of unsupported solid bodies by saying that they were seeking a state of rest in their proper place, namely, the center of the earth. But the modern physicist confines himself to devising mathematical formulas that fit the movement and ignore the question as to what goal, if any, is being sought.

Faced with these discrepancies, the Thomist invokes a distinction among levels of abstractness. The scientist, for his special purposes, namely, prediction and control, need consider only certain aspects of the nature of physical things; and no doubt he can slice his units thicker or thinner as the occasion demands. In particular, consideration of the ends to which things are directed is of no value for this purpose. But the metaphysician, who is interested not in controlling things, but in grasping them as they are in themselves, is not restricted to the superficial view taken by the scientist (cf. similar points in Whitehead and Bergson). Through the intellectual intuition described below by Maritain he sees that everything does have an essential nature, which directs it to certain ends, however unnecessary it may be to take this into account for purposes of scientific prediction.

It appears that by this maneuver the Thomist can avoid an open conflict with science. But it must be realized that in so doing, he is severing his philosophy from the roots it initially had in scientific thought and thus foregoing the possibility of drawing support and sustenance from that source.

Not much has been said in this introduction about the contributions of Maritain himself. That is because we are thinking of Maritain primarily as an interpreter of Thomism for our times, rather than as an original philosopher in his own right. But that is not completely fair. While working entirely within the Thomist tradition, Maritain has, at certain points, left the mark of his own individuality on that tradition. One that is particularly worthy of note in this volume is his interpretation of Thomism as a sort of existentialism, an interpretation that has been widely adopted by other Thomists.² In claiming the title of existentialism for St. Thomas, Maritain makes use of a formula

Sartre puts forward as typical of existentialism: "Existence precedes essence." Maritain's interpretation of this formula is as follows. Many philosophers are looking primarily for intelligibility, for something completely permeable by the intellect. As a result what they take to be metaphysically ultimate is essence, that is, an intelligible form or possible determination of things, which possesses this metaphysical ultimacy whether or not it is exemplified by any actually existing things, for example, the form of triangularity. The world of existing things is grudgingly conceded the status of an afterthought. Plato's realm of "Ideas" is the best-known example of this sort of philosophizing; Hegel's procedure of constructing the Absolute out of the interplay of pure logical forms is an equally good example. For St. Thomas, on the other hand, the *act* of *existence* is taken as ultimate, even though it is not as luminous for the intellect as an abstract essence. Essences then come in derivatively, as the various modes in which the act of existence can be exercised. Existence is the concrete inclusive reality, of which essences are aspects. The claim is that this approach gives us a much more adequate framework in which to think about the world in which we find ourselves, which is, after all, made up of existing things, however painful this fact may be to mathematically minded philosophers from Plato to Russell. In particular, on this approach we can avoid the hopeless task of making a transition from a realm of pure essences to the world of actually existing things. In this "existentialism" God is understood not (as in Neo-Platonism) as the ineffable static unity of all intelligible forms but as the pure act of existing. In this connection Gilson has repeatedly called attention to the passage in Exodus in which Moses says in Jahweh: If "they [the people of Israel] ask me, 'What is his name?', what shall I say to them?" God said to Moses, 'I am Who I am.' And He said, 'Say this to the people of Israel, I AM has sent me to you.'"³ Here, according to Gilson, is the existentialism of St. Thomas in germ.

If you examine Sartre's development of the formula "existence precedes essence" in his lecture on Existentialism (or the summary given in the introduction to Sartre, see p. 752), you can see that these two forms of "existentialism" have little in common. Since Thomism is so sharply opposed to so many of the most characteristic tenets of what is usually called "existentialism"—the rejection of absolute standards, the rejection of the possibility of an impersonal "scientific" metaphysics, the analysis of human existence as a key to the nature of being—one may feel that Maritain is simply latching onto a popular term for the sake of publicity. Be that as it may, it is true that Maritain has pointed out a crucial respect in which Thomism is distinct from many other metaphysical systems, and he has effectively used the current preoccupation with existentialism to sharpen the awareness of that distinction.

W. P. A.

References

1. Raissa Maritain, *We Have Been Friends Together*, J. Kerman (trans.), New York, Longmans, Green, & Co., 1942.
2. See, e.g., Etienne Gilson, *Being and Some Philosophers*, Toronto, Pontifical Institute of Medieval Studies, 1952.
3. Exodus 3:13-14, Revised Standard Version.

Lectures on Metaphysics

by **JACQUES MARITAIN**

SECOND LECTURE: COUNTERFEIT METAPHYSICAL COIN

¶ *Statement of the Problem*

2. As you know, it is a fundamental doctrine of scholastic philosophy that the formal object of the intellect is being. In the case of the human intellect there are two levels, two states or two quite distinct phases to be taken account of.

In the first place the Thomists, and in particular Cajetan, enquire what is the object first attained by the human intellect, an object therefore which every man attains the instant he begins to think as a rational being, an object presented from the outset to the human mind. They answer with Cajetan: it is being as enveloped or embodied in the sensible quiddity, being "clothed" in the diverse natures apprehended by the senses, *ens concretum quidditati sensibili*.

It is something confisally contained in this or that particular nature for

From *A Preface to Metaphysics* by Jacques Maritain, Sheed & Ward, Inc., New York, and Sheed and Ward, Ltd., London, 1939.

example, in the dog, the horse, the pebble, something clothed in this or that object and diversified by it. It is not, therefore, the element common to all these things, disengaged from them, *extricated* in its purity. Nor yet is it diversity in its pure state, that is to say the manifold of diverse essences and diverse sensible quiddities. It is at the same time the particular quiddity and being in general. It is being as enveloped, embodied, in the manifold of natures or essences. This is what the Thomists teach us of the object attained primarily and in the first instance by the human intellect. But we must be quite clear that this is not the object of metaphysics. If it were, a child, as soon as he begins to perceive objects intellectually, would already be a metaphysician. For the object of which we are speaking is the object which the intellect attains primarily and in the first instance.

The object of metaphysics—and we now pass to an altogether different level, an entirely different phase in the process of human intellection—is, according to the Thomists, being as such, *ens in quantum ens*, being not clothed or embodied in the sensible quiddity, the essence or nature of sensible things, but on the contrary *abstractum*, being disengaged and isolated, at least so far as being can be taken in abstraction from more particularized objects. It is being disengaged and isolated from the sensible quiddity, being viewed as such and set apart in its pure intelligible values.

Metaphysics therefore at the summit of natural knowledge, where it becomes fully wisdom, brings to light in its pure values and uncovers what is enveloped and veiled in the most primitive intellectual knowledge. You can see how dangerous it would be to confuse these two phases, these two states and to imagine, that, as so many modern philosophers believe, that for the Thomist the metaphysical habitus is specified by being, as it is primarily attained by our intellect.

.....

6. At this point further distinctions are necessary. When we consider the object first attained by the human intellect of which we were speaking above, namely being embodied in sensible natures, we find that it can be envisaged from two different points of view, either as it is apprehended by knowledge of sensible nature and the divers experimental sciences, or as it is apprehended by common sense.

¶ *Particularised Being*

7. We shall consider first the natural sciences. As St. Thomas has just reminded us, though these sciences certainly study being, it is a being presented to the mind as differentiated, or masked, by particular conditions and a particular "behaviour." Knowledge of nature considers sensible and mobile being, either as the object of the *philosophy of nature*—which is intelligible being but considered with the particular qualification of muta-

bility, that is, in so far as it is involved in the sensible and changing corporeal world—or as in the *empirical sciences* being as the mere foundation of observable and measurable phenomena. We may designate as *particularised being* this being in so far as it is studied by the divers sciences of nature. The terminology I am suggesting is not the accepted terminology of the schools. It is simply a means of bringing home to you certain points of fundamental importance.

Now observe: for the sciences thus specified and demarcated not by *being* but by *being of a particular kind*, the notion of being taken as such has and can have no meaning. If we speak to a scientist, of being as such, he can make nothing of it. For to the habitus which he represents it is nothing. By this I do not mean to say that the scientific-experimental habitus pronounces that it is nothing. For it would transgress its natural boundaries by pronouncing upon an object which is beyond its province. I say that the scientist as such can make no pronouncement on the subject. It is beyond his scope, and therefore he knows nothing of it.

¶ *Vague Being*

8. If now we adopt the standpoint of common sense it is quite another matter. The perspective has entirely changed. For we are now confronted with an infra-scientific or pre-scientific knowledge, the term scientific being here understood in a universal sense as a perfect, and certain knowledge, knowledge in the strict sense, knowledge by causes whether it is afforded by the divers particular sciences, by the philosophy of nature, or by metaphysical wisdom. The knowledge of common sense is a natural and spontaneous growth, the product so to speak of rational instincts and has not yet attained the level of science. It is an infra-scientific knowledge. Nevertheless this infra-scientific knowledge is more universal than that of the various particular sciences of which I have just spoken. It possesses a certain metaphysical value in as much as it attains the same objects as metaphysics attains in a different fashion. Common sense is therefore, as it were, a rough sketch of metaphysics, a vigorous and unreflective sketch drawn by the natural motion and spontaneous instincts of reason. This is why common sense attains a certain though unscientific knowledge of God, human personality, free will and so on.

Here, indeed, is the being of the metaphysician. It has a meaning for common sense. It is the hidden sinew of all that common sense knows of the things of the spirit. But it is not *known* as such. Otherwise every man would be a metaphysician, and the metaphysical habitus would not be, as it is, a sublime and exceedingly rare mental endowment. It would be simply common sense. In fact being as such is apprehended blindly at this

level, in a sign, an object of thought, which is, as it were, a *surrogate* and a *mask of being as such, ens in quantum ens*.

To be more precise: Speak to common sense of "Being." Observe that common sense would not itself mention it. It reasons about particular objects basing itself implicitly on the being they possess. From the consideration of these particular objects it rises to their First Cause. And this ascent necessarily implies that means of proof which being is. For unless we consider the being in objects we could not rise to the First Cause of all being. But this operation of common sense is implicit, as is the support it finds in the object of thought, "being." By itself common sense cannot disengage this notion of being and envisage it in its distinctive mystery. Let the metaphysician, I say, talk to common sense and speak of "Being as such." Common sense will not explicitly conceive this being of which he speaks otherwise than as the object of what Thomists call *abstractio totalis*, an abstraction which is pre-scientific and infra-scientific. . . .

It is the mere disengagement of a universal from the many particulars it subsumes, the simple operation by which, before enquiring whether in what I call man there exists an original focus of intelligibility and what that focus is, I derive from *Peter* and *Paul* the object of thought "Man," then from *Man* in turn the object of thought "Animal," thus passing successively to increasingly general universals. The rich content of intelligible light remains implicit, as it were dormant. What appears explicitly is that on which the logical relations of greater or lesser generality are founded. This extensive abstraction is common to all knowledge, to pre-scientific knowledge as well as the scientific knowledge which presupposes the former. By hypothesis, on the level at which we are standing, we are envisaging objects from the point of view of common sense; consequently our knowledge of them is imperfect, not yet scientific. At this level no other hierarchy obtains between the concepts thus abstracted than that which arises from what the logician, as he reflects upon them, will term extensive relations. Thus, we perceive the notion of animal, for example, to be more extensive than that of man. But we have not yet explicitly disengaged what it is that distinguishes the former from the latter. For we are concerned with the confused and still imperfect notions of objects formed by common sense. Similarly we perceive the notion of being to be the most extensive, the widest of all notions. But we have not yet disengaged the properties of being as the primordial source and focus of intelligible mystery, and have not yet seen its distinctive countenance.

Observe that although what I am saying looks very simple, it is, in fact, very difficult: because we are trying to grasp what takes place in us at two different phases of knowledge which are expressed by the same words, indeed by the same word, being. We may live in the company of a man, yet not know the colour of his eyes or the individual mystery of his soul. If we are asked who is he, we reply, my friend the man who shares my

amusements or my work. Yet we have not seen his unique psychological countenance.

It is the same with this object of thought, this primordial reality we call *being*. We have not looked it in the face. We think it something far simpler than it is. We have not yet troubled to unveil its true countenance. We do not suspect the peculiar mystery contained in the notion of it. For us, so far as our explicit knowledge is concerned, being is simply the most general and the most convenient of the classifications which we constantly employ and in which all the objects of our thought are arranged, the most comprehensive of them. It is merely a class.

This is true. But although common sense, when we mention being, explicitly thinks only of this most general class, nevertheless—and this second feature is as typical and as important as the first—it places in this class all the diverse objects of sense, all the varieties of being, a chaotic universe of innumerable forms, so that, if we may so put it, the comprehensive class *together with* the host of sensible objects which fill it, is, as it were, the *practical equivalent and the surrogate* of the being which is the metaphysician's concern.

But it is not yet that being as the metaphysician is to see it and disengage it. Just now when I was speaking of the sciences inferior to metaphysics, I spoke of *particularised being*, masking and enveloping the metaphysical concept of being. In this case it is *vague being* that masks it. The metaphysical concept of being is present. But it is not disengaged but disguised, invisible. This vague being of common sense renders it possible to work upon what is really (though the user does not know it) the metaphysical notion of being, and thus reach true pre-philosophic conclusions about certain fundamental problems which the metaphysician will settle scientifically and philosophically. That is to say, we are here confronted with an imperfect state of knowledge and at the same time with a species of philosophy corresponding with it, which is not yet philosophy, not yet perfect knowledge, but the prefiguration and preliminary sketch of philosophy.

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THIRD LECTURE: THE TRUE SUBJECT OF METAPHYSICS

¶ 1. *The Intuition of Being as Such*

.....

The being which is the subject matter of metaphysics, being as such, is neither the particularised being of the natural sciences, nor the being divested of reality of genuine logic nor yet the pseudo-being of false logic.

It is real being in all the purity and fullness of its distinctive intelligibility—or mystery. Objects, all objects, murmur this being; they utter it to the intellect, but not to all intellects, only to those capable of hearing. For here also it is true: He that hath ears to hear let him hear. *Qui habet aures audiendi audiat*. Being is then seen in its distinctive properties, as trans-objectively subsistent, autonomous and essentially diversified. For the intuition of being is also the intuition of its transcendental character and analogical value. It is not enough to employ the word being, to say “Being.” We must have the intuition, the intellectual perception of the inexhaustible and incomprehensible reality thus manifested as the object of this perception. It is this intuition that makes the metaphysician.

.....

3. Enough of this digression. We are confronted here with a genuine intuition, a perception direct and immediate, an intuition not in the technical sense which the ancients attached to the term, but in the sense we may accept from modern philosophy. It is a very simple sight, superior to any discursive reasoning or demonstration, because it is the source of demonstration. It is a sight whose content and implications no words of human speech can exhaust or adequately express and in which in a moment of decisive emotion, as it were, of spiritual conflagration, the soul is in contact, a living, penetrating and illuminating contact, with a reality which it touches and which takes hold of it. Now what I want to emphasise is that it is being more than anything else which produces such an intuition. The characteristics of intuition as I have just described them may seem at first sight those of M. Bergson’s intuition. They seem so, in truth, but with the important difference that he denies that his intuition is intellectual. I, on the other hand, have just maintained that the object par excellence of intuition is being, but that that intuition is intellectual. This is remote indeed from the Bergsonian philosophy. Being does not produce the intuition such as I have described it, by means of that species of sympathy which demands a violent return of the will upon itself of which M. Bergson speaks, but evokes it from the intellect and by means of a concept, an idea. The concept, or notion, of being corresponds with this intuition. The term being is the correct term to express it, though obviously we cannot display by this poor word nor for that matter by the most skilful devices of language all the wealth contained in the intuition. It requires all the metaphysics hitherto elaborated or to be elaborated hereafter in its entire future development to know all the riches implicit in the concept of being. It is by producing in conjunction with reality a mental word within itself that the intellect immediately attains being as such, the subject-matter of metaphysics.

Thus we are confronted with objects and as we confront them, the diverse realities made known by our senses or by the several sciences, we receive at a given moment, as it were the revelation of an intelligible mystery concealed in them. Nor is this revelation, this species of intellectual shock,

confined to metaphysicians. It is sometimes given to those who are not metaphysicians. There is a kind of sudden intuition which a soul may receive of her own existence, or of "being" embodied in all things whatsoever, however lowly. It may even happen that to a particular soul this intellectual perception presents the semblance of a mystical grace. I have quoted elsewhere (*Degrés du Savoir*, p. 552) a personal experience communicated to me.

"I have often experienced in a sudden intuition the reality of my being, the profound first principle which makes me exist outside nonentity. It is a powerful intuition whose violence has sometimes frightened me and which first revealed to me a metaphysical absolute."

A similar intuition is described in the autobiography of Jean-Paul Richter. "One morning when I was still a child, I was standing on the threshold of the house and looking to my left in the direction of the wood-pile when suddenly there came to me from heaven like a lightning flash the thought: *I am a self*, a thought which has never since left me. I perceived my self for the first time and for good."

There are, therefore, metaphysical intuitions which are a natural revelation to the soul, invested with the decisive, imperious and dominant character, of a "Substantial word" uttered by reality. They reveal the intelligible treasure, the unforgettable trans-objective fact, which is either her own subsistence, the "Self" that she is, or being either her own or the being apprehended in objects. Evidently this intuition of which I am speaking does not necessarily present this appearance of a species of mystical grace. But it is always, so to speak, a gift bestowed upon the intellect, and beyond question it is in one form or another indispensable to every metaphysician. But we must also observe that although it is indispensable to the metaphysician, it is not given to everybody, nor to all those who engage in philosophy, nor even to all philosophers who desire to be or are believed to be metaphysicians. Kant never had it. What is the explanation of this? That it is difficult. It is not indeed difficult like an operation which it is hard to perform, whose successful performance demands expert skill. For there is nothing simpler. It was precisely because he sought it by a technique, an intellectual technique of extreme subtlety, that Kant failed to attain it.

Moreover, it is as true to say that this intuition produces itself through the medium of the vital action of our intellect, I mean as vitally receptive and contemplative, as to say that we produce it. It is difficult, inasmuch as it is difficult to arrive at the degree of intellectual purification at which this act is produced in us, at which we become sufficiently disengaged, sufficiently empty to *hear* what all things whisper and to *listen* instead of composing answers.

We must attain a certain level of intellectual spirituality, such that the impact of reality upon the intellect—or to use a less crude metaphor, the active attentive silence of the intellect, its meeting with the real—gives the objects received through our senses (whose *species impressa* is buried in

the depths of the intellect) a new kind of presence in us: they are present in a mental world, another life, a living content which is a world of trans-objective presence and intelligibility. Then we are confronted within ourselves with the object of this intuition, as an object of knowledge, living with an immaterial life, with the burning translucence of intellectual nature in act.

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FOURTH LECTURE: CONSIDERATIONS ABOUT BEING AS SUCH

¶ I. *The Analogy of Being*

.....

ESSENCE AND EXISTENCE

3. I will attempt to bring out more clearly the intelligible subsistence contained in this the first object grasped by the metaphysician's intuition. We are immediately aware of this characteristic of it that when we consider different things there is in each alike a typical relationship between *what* is, that which philosophers term essence or nature, and its *esse*, or existence. That is to say this notion of being involves a species of polarity, essence-existence.

A notion of being which completely abstracts from either of these two aspects is impossible. Surely this fact is worth our attention. The concept of being implicitly involves in its analogous or polyvalent unity the division of being into created and uncreated, into substance and accident. For when I reflect upon being I see it divided into typical kinds of being which differ throughout, created and uncreated being, substantial and accidental being. But in virtue of its essential structure the concept of being also includes in itself indissolubly—at every degree of its polyvalence, and whichever kind of being we are considering, throughout its entire extent, the boundless field which it can cover—these two linked and associated members of the pair essence-existence, which the mind cannot *isolate* in separate concepts. Whatever being I may think of, its concept implies this double aspect. Metaphysics teaches us that in God the distinction between essence and existence is a *distinctio rationis*, a purely ideal distinction, but that in all created objects there is a real distinction between them. Thus the idea of being, however imperfect its unity may be, from the very fact of its higher degree of abstraction, possesses, like every idea, though its unity is imperfect and relative, more unity than the reality it signifies. Not only does this identical notion, when it signifies one analogous being, continue to be valid of another totally different. It also permanently unites in our mind, by its

multiple and relative unity, realities—namely essence and existence—which outside the mind are really distinct. To this same notion, to the imperfect unity of the concept of being a real diversity in things permanently corresponds, namely that between essence and existence in all creatures. This is the first observation we can formulate.

BEING AND THE TRANSCENDENTALS

4. When we consider the transcendentals we reach a second conclusion. There is a reality which I attain in the notion of being, in the intuition of being, and which I express by the term being; and it becomes evident that this reality—even as objectively manifested by and in the notion of being—is richer and more pregnant with intelligible values than the idea of being by itself immediately reveals. By an intrinsic necessity it must in a sense overflow the very idea in which it is objectified.

This is what I mean. You know that metaphysicians recognise a certain number of universal modes of being, as universal as being itself, which are termed transcendentals (*passiones entis*). For example *unity* is being in as much as it is undivided. This is an aspect of being which rises before the mind—namely its internal consistence. Certainly being can be divided. But in so far as it is, it ceases, renounces itself. To the extent to which anything is, it is one. *Truth* is being in as much as it confronts intellection, thought; and this is another aspect of being, thus revealed, a new note struck by it. It *answers* to the knowing mind, speaks to it, superabounds in utterance, expresses, manifests a subsistence for thought, a particular intelligibility which is itself. An object is true—that is to say conforms to *what* it thus says itself to thought, to the intelligibility it enunciates—to the extent that it is. What is then manifest is of the nature of an *obligation* attached to being. An *I ought to be* consubstantial with *I am*. Every being ought to be and is, in so far as it is, in conformity with the expression of it which a perfect Knowledge would produce. Then there is *goodness*, transcendental *good*. Good is being in as much as it confronts love, the will. This is another epiphany of being. I shall return to it later. Everything is good, metaphysically good. I am not speaking of moral goodness. Everything is good, that is to say, apt to be loved, to be an object of love, to the extent to which it is.

Hence each of these transcendentals is being itself apprehended under a particular aspect. They add nothing real to it. How could they add anything to being? Outside being there is but nonentity. They are, so to speak, a reduplication of being for and in our mind. There is no real distinction between being and unity, between being and truth, between being and good. They are “convertible” notions. The distinction between these different intelligible infinities is merely conceptual, though based on reality, a virtual distinction.

You see, then, that of a single reality, of something which is one and the same outside my mind, of something which precisely as being is one, true and good, of this single and unique reality which exists or is capable of existing outside my mind I possess *several* ideas. The idea, the notion, the *ratio*, the concept of being qua idea, differs from the idea of unity, of truth, of goodness or good. I therefore possess many ideas which correspond to a single and identical reality too rich, too fertile to enter my mind by the medium of a single idea, not even this primary idea, the idea of being. We may say that being compels the concept of being to multiply diverse concepts and exceed itself.

BEING AND TENDENCY

5. A third consideration relates to the dynamic character of being, the fact that I cannot posit this reality, grasped by my primary intuition of being as such, without at the same time positing a certain *tendency*, a certain inclination. The Thomists repeating St. Thomas's dictum "every form is accompanied by an inclination," hold that this is a truth self-evident to anyone who possesses the metaphysical intuition of being.¹

To affirm being is to affirm inclination or tendency. We are thus confronted with a kind of communicability or superabundance which is an inherent character of being itself, in as much as the notion of being, as I have just hinted, exceeds itself and passes over into the notion of *goodness* or *good*.

In metaphysical good a new order is disclosed, a certain *right* to exist consubstantial with *existence*. For good is seen to be, as it were, a justification of being. It asserts a merit. Being is justified in itself—*justificatum in semetipso*, because it is good. Good, I say, asserts a merit—a glory also and a joy. By this I mean that good, as I indicated above, is essentially bound up with love. A good thing is worthy, metaphysically, though alas not always morally, to be loved, either in and for itself, as a perfection, with a direct affective love²—this is good in the primary sense—or as perfecting something else, with a reflex³ affective love, this is good in the secondary sense.

1. *Haec propositio, quod ad omnem formam sequitur inclinatio, per se nota est*, John of St. Thomas, *Curs. Phil.* Vives, Vol. III, p. 523—*Omne esse sequitur appetitus*. Cajetan in I, 19, I.

2. I understand by this a love which wills an object in and for itself. Such is the intellect's love of truth, or the upright man's love of "moral good" the *bonum honestum*, or the "love of friendship," we entertain for ourselves or others.

3. I understand by this a love whose motion is bent, passing from an object it wills to another object, which is loved with a rectilinear love. Such is the love of what is good for use or pleasure, the *bonum utile* and the *bonum delectabile*, or the "Love of desire," with which we will a particular good to ourselves or our friends.

The notion of good, like every transcendental notion, is a primary notion, which suddenly enters the field of vision when we look at being from a particular angle, and reveals a new aspect of it, a new intelligible mystery consubstantial with being. This prospect in the depths of being is disclosed, together with the love which it confronts and in relation to which it is defined. An intellect which *per impossibile* lacked the notion of love would lack that of good which is correlative to it.

6. I have affirmed that the truth, *ad omnem formam sequitur inclinatio*, or even more generally wherever there is being, there is tendency and love, *omne esse sequitur appetitus*, is evident immediately we perceive that the idea of being passes over of itself into the idea of good, that being overflows in good or goodness. This axiom can be verified in two different ways, on two distinct planes, as the superabundance of being is regarded in relation to that which superabounds or in relation to that which receives or may receive this superabundance.

Let us contemplate this aspect of being, metaphysical good in respect of the multitude of different existents (*omnia*). By the very fact that being is good it implies *in all existents* a tendency towards, a desire of this good. That is why the ancients with Aristotle defined good as *id quod omnia appetunt*, what all things, individually and severally, desire. Thus one thing is good for another, and moreover on all the analogical levels. We say that rain is good for vegetables, truth good for the intellect. The correlative desire, whether of the vegetables for the rain or of the intellect for truth, pertains to what the scholastics term *appetitus naturalis*, what we may call "natural," or consubstantial, inclination (appetite). Thus matter desires form or rather forms, and this desire is itself. Only by that desire does it partake of being. We say that food is good for an animal. This desire pertains to the sensible appetite. We say that to enjoy the good opinion of his fellows is good for man, or that a friend's existence is good for the man whose friend he is. The desire for these goods pertains to the intelligent appetite or the will. It is, therefore, in all sorts of ways essentially different that one thing is good for another. And God is good for all things and they desire Him.

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BEING AND MOTION

9. The fourth point to which I would draw your attention is the fact that the reality which I attain by the idea of *being* thus implies the *motion* which appears incompatible with it. As we have just seen every being involves a tendency. But a tendency is a motion towards the perfection desired, if it is absent. Consequently wherever there is tendency towards a good not already really conjoined with the subject, as a perfection possessed

by it or as a friend united with it by presence and *convivium*, community of living—that is to say wherever throughout the created universe creatures display tendency and need to perfect themselves in one fashion or another, and above all in the corporeal universe, the metaphysical home of indigence, there is motion, change.

It is not, therefore, enough to observe that the fact of motion forces itself upon the philosopher as an undeniable fact of experience which is apparently incompatible with being as intuitively apprehended by intellect—from this arose the classical conflict between Heraclitus and Parmenides. We must maintain that being itself—the object of metaphysical intuition—because it involves tendency, involves the motion which seems incompatible with it. Being, therefore, must comprehend two levels, that of actual being, being in act, and potential being, being in potency, that is real possibility, real capacity for a particular determination or perfection. It is this distribution of being on two levels which makes possible a metaphysical analysis of motion. But these two levels, act and potency, are themselves essentially analogous. It is analogously that the notions of act and potency are realised in two different objects.

These very brief observations have been designed simply to make you aware of the diversity and riches contained in the primary intuition of being as such. We must now return to what I have termed the eidetic character of the metaphysical intuition of being, to the fact that it is effected by an abstraction, an “ideating” visualisation.

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FIFTH LECTURE: THE PRINCIPLES OF IDENTITY, SUFFICIENT REASON AND FINALITY

¶ I. *An Attempt to Reflect upon the Intuitive Character of First Principles*

1. For Thomism there are many first principles. But an order obtains among them. This does not mean that those which come after the first can be demonstrated from it, but that we can prove by a *reductio ad impossibile*, that if any of the other first principles of reason is denied you necessarily deny the first, namely, the principle of identity, and if the principle of identity is denied you can neither think nor speak, cannot indeed *exist* as a thinking being, as a man.

Nevertheless I am not going to enter to-day on this path of *reductio ad absurdum*. I shall invite you, above all, to reflect upon the intuitive character of the first principles. To bring home to ourselves the intuitive value of these first principles of reason it is important to remember what I said in my last lecture about the riches of being, the fact that when this object of

thought becomes known to me by and in the notion of being, I am aware at the same time of its expansive energy. The reality which I attain in and by my idea of being is, in as much as it becomes objectified in my idea, richer than that idea, and presses for multiplication in a manifold of notions, notions of unity, of goodness, of truth. These are transcendental notions. Each of them expresses to the mind nothing but being itself, to which it adds nothing save a conceptual difference, a conceptual aspect. In virtue, however, of precisely this ideal element in which one differs from another, these notions, as notions, differ one from another and from the notion of being. They are convertible but not identical notions, and their names are not synonyms. Thus there is, as it were, a superflux of being in respect of our ideas, of the notions in which it is objectified, and it is in terms of this superflux that I wish to put before you some brief reflections on the first principles. We shall try to understand how the mind sees these first principles enter its field of vision. I mean the first principles of speculative reason, the principle of identity, sufficient reason, finality and causality. I shall not deal with the principle of non-contradiction. For it directly concerns logic not metaphysics, and is but the logical form of the principle of identity. It is the latter reflected onto the plane of the life lived by objects in the mind as objects of knowledge, the principle of identity applied to logical affirmation and negation.

THE PRINCIPLE OF IDENTITY

2. No sooner do we possess the intuition of intelligible extra-mental being, than it divides, so to speak under our eyes, into two conceptual objects. On the one side there is being as simply existing or capable of existence, as simply given to the mind, or, if you prefer, as a "thing" in the modern sense of the word. For the ancients thing was synonymous with essence. To the moderns, it would seem it primarily signifies a simple existent actually given. On one side, then, there is being given *to* the mind. On the other side, in another concept which is still being, but under a different aspect, being is perceived as involving certain exigencies and certain laws, or, if you prefer, as recognised, admitted, affirmed *by* the mind—or as perfection and determination. These two complementary aspects of being are apprehended by the mind, distinguished, in a purely ideal fashion, as two different concepts expressed by the same word. Their difference, which we may term *functional*, is revealed simply in the use which the mind makes of the concept or notion of being, in the latter case as subject, in the former as predicate.

Then the mind intuits that in these two functionally different notions it is thinking of *the same thing*. It sees intuitively the first principle of all which it will formulate thus: *each being is what it is*. Here "*each being*" is being given to the mind and "*what it is*" is its intelligible determination,

being as affirmed by the mind. Being thus, if we may say so, duplicates itself. To its aspect as posited in existence it adds its aspect as intelligibly determined, as an essential quality.

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3. But there are other ways, perhaps more significant, of stating this same principle of identity. Dr. Gerald Phelan prefers to say *being is being*, and in my opinion there is very much to be said for his preference. Properly explained this formula is seen to be extremely comprehensive. *Being is being*, this means first of all, "Each thing is what it is," the very formula I first suggested. But it also means, and in this case the predication and affirmation concern the act of existence, "what exists exists." This is no tautology, it implies an entire metaphysic. What is posited outside its causes exercises an activity, an energy which is existence itself. To exist is to *maintain oneself and to be maintained* outside nothingness; *esse* is an act, a perfection, indeed the final perfection, a splendid flower in which objects affirm themselves. Moreover, the formula also means "being is not non-being." And this also, far from being tautologous, is pregnant with meaning. Being is being, it is not so simple as you might suppose, it is being, it possesses resources and mysteries. The principle of identity affirms the affluence, the luxury of being.

What an excellent thing it is that we are compelled to stammer, debate, and dispute, that we meet with technical difficulties in formulating the first self-evident intellectual principle. It is indeed proof that it is not a matter of formulas but a living intuition whose purely spiritual light incomparably transcends all the words in the dictionary.

The principle of identity is concerned with being outside the mind, with the implications of being at least possible, and is thus not a law of thought but the first law of objects outside the mind apprehended in the intuition of being. Even in this case St. Thomas's most important dictum concerning the judgement is still verified. For there is a conceptual difference between the subject and the predicate. The principle of identity is not tautologous. For there is in it a conceptual difference between the subject and predicate. They do not, functionally at least, present to the mind the same formal object, even though in both cases the same term being is employed. And it is the distinctive characteristic of the judgement to recognise the identity in the concrete object of what thus differs conceptually. In this case this identity is recognised by a simple inspection of the terms.

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¶ II. *The Principle of Sufficient Reason*

5. Here also we observe that being divides itself, so to speak, into two objects of thought, two conceptual objects, which, however, are throughout

being itself. In this instance, however, the operation is of a totally different nature to what it was in the case of the principle of identity. On the one hand, there is being taken simply as what exists or can exist, the transcendental *ens*, and on the other hand there is being as transcendently true. We pass over to the transcendental *truth*, to being as it confronts the intellect. And the latter word is taken in the most general and most indeterminate sense, no distinction being yet made between created intellect and the Uncreated. Being here confronts us as satisfying the natural desire, fulfilling the essential aim of the intellect. It must do this because it is its end, because the intellect is made for being.

We can say, therefore—I am trying to express the original intuition formulated by the principle of sufficient reason—that *being must be the sufficient good of intellect*. And this guides us directly to God, the Being *that is of itself the perfectly sufficient good of intellect*, the Being that is fully self-sufficient in the intelligible order, and constitutes the beatitude both of His own and of every intellect. But in fact we are confronted not with God beheld intuitively but with a host of other beings which are deficient. Therefore we cannot enunciate our intellectual perception of the bond between *ens* and *verum* without introducing a distinction. We must say: *being must either possess its intelligible sufficiency of itself, a se, or derive it from some other being, ab alio*. This is a preliminary and approximate statement of the principle of sufficient reason.

In other words, the intellect which is made for being in as much as it is intelligible, must possess it complete and fully determined. It is not satisfied with regarding the being of an object as a simple fact, by the mere fact that an object exists. It will find rest and satisfaction only in what completes and determines the object in as much as it is intelligible, in as much as it confronts a faculty of knowledge. Since, however, intelligibility goes hand in hand with being, that which determines an object in respect of intelligibility is that which grounds it in respect of being, grounds its being, in other words *that in virtue of which it is*. We have thus brought out the notion of sufficient reason. It is that in virtue of which an object is. We must, therefore, enunciate the principle of sufficient reason in one of the two following ways: *Everything which is, to the extent to which it is, possesses a sufficient reason for its being*; that is to say, is grounded in being, so that, to put it in another way, it is capable of explaining itself to the intellect, though not necessarily to *our* intellect; *whatever is, is intelligibly determined; whatever is, has that whereby it is*. Both these formulas must be taken in the most general sense.

6. This principle has a far more general scope and significance than the principle of causality. For the principle of sufficient reason is exemplified in cases in which the efficient cause plays no part. For instance, man's rationality is the ground, the sufficient reason of his *risibilitas* and *docilitas*. Similarly the essence of the triangle is the ground of its properties, and there is no

difference of being, no real distinction between the properties of the triangle and its essence. Again God's essence is the ground of His existence, He exists *a se*, He is Himself and sufficient reason of His *esse*, the ground of His existence, since His essence is precisely to exist.

This expression *a se* itself possesses a transcendent meaning, which, moreover, presupposes the entire analogy of being. It has often been misconceived by philosophers, by Descartes in particular. Descartes, understanding the Divine aseity univocally, thought himself compelled to choose between an exclusively logical and purely negative conception of this aseity as meaning simply that God *has no* cause, and an ontological and positive conception as meaning that God is *the cause of Himself*, in virtue of the infinite fullness of His essence. Not only did Descartes confuse sufficient reason with efficient cause, he conceived that Divine existence univocally. He reduced it, like the existence of creatures, to the mere fact of being posited outside nothingness, *natural* or entitative existence. Its Divinity can then consist only in the fact that it implies a perfect and an infinite efficacy. It is an earthbound philosophy. The Divine existence is infinitely more than this. It is an act of intellection, an existence of *knowledge* or *intellection*. That is why to affirm that God exists is not simply to state an empirical fact, to affirm an existence, even a necessary existence. It is to affirm an intelligible justification of existence which is eternal, an eternal and infinite satisfaction of an infinite demand for intelligibility, an infinitely full repose for the intellect.

A se: the Divine aseity does not signify a simple necessity, like geometrical necessity. The expression relates to the principle of sufficient reason, itself based on the intelligibility of being. It signifies that God's being *fully satisfies the intellect*. If the philosopher could place himself at God's standpoint while retaining his human way of conceiving, since God exists by His essence and His essence is His very act of knowing, he would say: God is in virtue of Himself, because He is intellection, He exists because He knows Himself and His truth, because He is the infinite fullness of intelligibility in pure act thinking Itself, because His existence, His nature, is the eternally subsistent act of understanding. Moreover in knowing He wills Himself, loves Himself and this also is His existence, an existence of love. There is a superabundance of intelligibility in the Divine Being which can thus be the infinitely sufficient reason of Its own existence.

7. At a later stage we can reduce, or rather logically attach, the principle of sufficient reason to the principle of identity, by a *reductio ad absurdum*. This is a reflex operation which may, for example, be described compendiously as follows. The expression *in virtue of which*, when we say that in virtue of which an object is, must have a meaning or be meaningless. If it is meaningless philosophy is futile, for philosophers look for a sufficient ground of things. If, on the other hand, it has a meaning it is evident that in virtue of the principle of non-contradiction it is identical with the meaning

of the phrase *that without which* an object is not. If, therefore, anything exists which has no sufficient reason for its existence, that is to say which has neither in itself nor in something else, that in virtue of which it is, this object exists and does not exist at the same time. It does not exist because it lacks that without which it does not exist. This *reductio ad absurdum* proves that to deny the principle of sufficient reason is to deny the principle of identity. But the proof is a product of reflection. The original manifestation, spontaneous and intuitive, of the principle of sufficient reason is as I have described it above. Being is too rich to be given to us solely in the concept of being. It divides into two objects of thought conceptually different whose real identity we perceive immediately, namely being itself and an object of thought "grounded in existence" or intelligibly determined or "apt (in virtue of itself or of something else) to perfect the movement of intelligence."

Now observe that this intelligibility which accompanies being is in pure act only in the Divine Being. Not only is it the prerogative of God to be intellection in pure act, an act of knowledge in pure act, it is also His prerogative, indeed it is the same thing, to be intelligibility in pure act. You will therefore see at once that any philosophy which claims that all things should be perfectly transparent to the intellect, contain nothing whatever that baffles comprehension, must not be in the slightest degree opaque, any such system of absolute intellectualism is inevitably pantheistic. For it ascribes to creatures this intelligibility in pure act. If things are not God they must comprise a certain measure of unintelligibility in as much as they originate from nothingness. If in truth intelligibility accompanies being, it is obvious that in so far as anything is affected with nonentity it must possess a root of unintelligibility. Its relative nonentity is also a relative unintelligibility. We can now understand why the doctrine of *dunamis*, *potentia*, is of such great metaphysical importance. At one extreme are the systems of absolute intellectualism, Spinozism for example. At the other are philosophies of absolute irrationalism, for example that of Schopenhauer. Between these contrasted errors there rises like a peak such a system as Aristotle's which perceives that being and intelligibility go hand in hand and that in consequence of this all beings other than God must comprise in their metaphysical structure together with factor of relative nonentity a factor of relative unintelligibility.

To this potentiality in all creatures and therefore in all created goods corresponds the dominating indifference of the will. The will is specified by good as such, that is to say it is unable as soon as it comes into operation to will anything without first tending to a good chosen as absolute. It thus of its own fiat renders efficacious the particular good which the understanding presents to it, and which determines it. For it pours out upon that particular good, of itself wholly incapable of determining it, the superabundant

determination it receives from its necessary object, good as such. It gratuitously makes that good purely and simply good for itself—the subject—in virtue, to put it so, of the fullness of intelligible determination with which it overflows. Thus the principle of sufficient reason plays no more magnificent part than its part in making possible the freedom of the will.

A further remark. This principle of sufficient reason is universal though its application is analogous. It is not valid only for this or that kind of being, for created or contingent being, for example, but for all being without exception. I have just shown that it is as valid for God as for creatures though in a totally different fashion. The principle of sufficient reason precedes the division of being into potency and act. To apprehend its necessity there is no need first to have recognised this distinction.

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¶ III. *The Principle of Finality: First Aspect*

9. I have just said that the principle of sufficient reason precedes the division of being into potency and act. I have now to point out that the principle of finality covers these two planes of potency and act. For there are two quite different expressions of this one principle. Among the scholastics the following formula is very common. Potency essentially refers to act, *potentia dicitur ad actum*. Here potency is regarded as passive potency or potentiality in its reference to the act which determines and perfects it. But there is another and a more important statement of the same principle: every agent acts in view of an end, *omne agens agit propter finem*. These are two quite different statements of the same principle. The former holds sway throughout the entire lower order of potency. It tells us that all potency is referred to the act which determines it. The latter, on the contrary, is concerned with the order of activity, of actuality and perfection. And since of its nature act precedes potency, this latter statement is the principal one.

8. We will now consider this principle of finality. Being, always in virtue of that wealth of which I have spoken, divides in a third way, altogether unlike the two former. We will first contemplate objects from below, from the standpoint of the potentiality implied by becoming. On the one hand being, taken in its lowest degree, is objectified as simply potential, as a capacity of being determined, as *potency*. On the other hand this same being or rather possibility of being is objectified as *referred to act*. So we affirm: potency is referred to act. Fundamentally it is the very notion of potency which is thus explained. For of its notion potency, and this is its intelligibility itself, all the intelligibility it possesses, is reference to a particular act. We can conceive potency only in reference to an act. Pure indeterminacy is unthinkable. Therefore potency and reference to an act are synonymous. Here we are concerned with the first mode of per-seity.

In view of what was said above of the dynamism of being, the fact that every being follows a tendency, an inclination, I affirm that potency has a natural desire, a natural appetite for act. This reference of potency to act is an ontological desire, a desire for act, potency itself.

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ALFRED NORTH WHITEHEAD

1861-1947

Introduction

The twentieth century, at least in English-speaking countries, has been predominantly an analytical, anti-speculative period ("The Age of Analysis," according to a recent anthology). The glaring misfit in this case is Alfred North Whitehead. And what makes his apostasy the more striking is that he first achieved fame as one of the faithful.

Whitehead was born in 1861, in a village in south-east England, the son of an Anglican clergyman and schoolmaster. At the age of nineteen he entered Trinity College, Cambridge University, where he studied mathematics. ". . . during my whole undergraduate period at Trinity, all my lectures were on mathematics, pure and applied. I never went inside another lecture room. But the lectures were only one side of the education. The missing portions were supplied by incessant conversation with our friends, undergraduates, or members of the staff. . . . Looking backwards across more than half a century, the conversations have the appearance of a daily Platonic dialogue."¹

After he became a fellow in 1885, Whitehead came into contact with two somewhat younger men at Trinity, G. E. Moore and Bertrand Russell. It is one of the curiosities of intellectual history that the three greatest English philosophers of this century were all at Trinity College during the same period. The association with Russell was of particular importance. In the early years of the century, the two men, each of

whom had published a book on the foundations of mathematics, discovered that their projected second volumes largely coincided; whereupon they decided to pool their efforts. The result was *Principia Mathematica*, one of the intellectual monuments of our time (for a brief characterization of this work see p. 291). During the period of his association with Russell, Whitehead also engaged in some very important work in the direction of constructing concepts of mathematical physics out of immediately given data (for the notion of logical constructions, see p. 292); see also his *Principles of Natural Knowledge* and *Concept of Nature*. After the completion of *Principia Mathematica*, the ties with Russell were gradually broken because of profound differences, both intellectual and otherwise. This should be apparent to anyone who reads the selections from both men in this volume. According to a widely circulated story, in later years Russell considered Whitehead muddleheaded, while to Whitehead, Russell was simple-minded.

In 1910 Whitehead resigned his lectureship at Cambridge and moved to the University of London, where in 1914 he became Professor of Applied Mathematics at the Imperial College of Science and Technology. Much of his time in London was taken up with administration, and he became keenly interested in the problems of mass education in an industrial society, an interest which is reflected in his books, *The Organization of Thought* and *The Aims of Education*.

Prior to 1924, all Whitehead's teaching had been in the field of mathematics. In that year, at the age of sixty-three, he accepted a Professorship of Philosophy at Harvard University. What followed amazed most of his former associates. This mathematician, logician, and analyst of scientific concepts began to propound a system of speculative metaphysics that is unsurpassed in the history of philosophy for scope, imaginativeness, and daring. It is expressed most fully in Whitehead's masterpiece, *Process and Reality*, a formidable work, which is flanked by two less systematic and complementary volumes, *Science and the Modern World* and *Adventures of Ideas*. To be sure, this development was foreshadowed in the earlier works, particularly the *Concept of Nature*. Whitehead never really sounded precisely like an analytical philosopher. He once remarked, "From twenty on I was interested in philosophy, religion, logic, and history. Harvard gave me a chance to express myself." But in fact the philosophical world was unprepared for what happened. Whitehead continued to teach at Harvard until 1937, long after the usual retirement age; and after his retirement he continued to radiate wisdom and gentility from his residence until his death in 1947. Some of the conversations at his "evenings" have been recorded in the *Dialogues of Alfred North Whitehead*.

Despite the tardiness of its flowering, Whitehead's genius had always been essentially a metaphysical one. His intellectual drive had always been toward synthesis, toward bringing together the apparently disconnected and mutually irrelevant. This can be clearly seen in his first book, *A Treatise on Universal Algebra*, in which he takes the sort of formal patterns we have in ordinary algebra and tries to give them a more general formulation, so that they can receive other than numerical interpretations, for example, geometrical and logical ones. The venture into speculative philosophy was an expression of the same sort of drive. *Process and Reality* opens with a notable definition. "Specu-

lative Philosophy is the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted."² In its emphasis on absolute generality, this statement conforms fairly closely to the conception of metaphysics in the grand tradition stretching from Aristotle's "science of being qua being" to McTaggart's "A consideration of what can be determined as to the characteristics which belong to all that exists, or, again, which belong to existence as a whole." But it is distinctive in being explicitly modeled on the method of hypothesis in science. This becomes clear when we realize that the latter part of the definition is designed to present the crucial criterion for the adequacy of a metaphysical system. To be adequate the system must be such that "everything of which we are conscious, as enjoyed, perceived, willed, or thought, shall have the character of a particular instance of the general scheme."³ This means that Whitehead set himself against the sorts of procedures that have been most often followed by metaphysicians. He rejected the notion that the method of philosophy "is dogmatically to indicate premises which are severally clear, distinct, and certain; and to erect upon those premises a deductive system of thought. . . . The accurate expression of the final generalities is the goal of discussion and not its origin."⁴ The alternative is what Whitehead calls "descriptive generalization," which consists in taking a set of concepts that have already been found applicable to some restricted area—biology, physics, art, logic—and trying to generalize them in such a way as to be applicable to all facts. The resulting system is then tested for defects, both internal (inconsistency, incoherence) and external (inadequacy to the facts). The scientific flavor comes from the heavy emphasis put on the external criterion. A large part of *Process and Reality*, and other books of this period, is an attempt to determine the extent to which the "categorical scheme" is adequate to various sorts of facts.

One criticism frequently leveled at Whitehead is that "he never argues for anything"; and you will discover that in the selection here reproduced he rarely pauses in his exposition to support what he is saying. But this lack is integral to his method. Remember that a metaphysical system is supposed to be coherent, that is, its constituent parts are supposed to hang together so as to require each other and indeed to be unintelligible without each other. This means that it would be futile to attempt to justify separate parts of the scheme piecemeal. The only hope lies in constructing the total scheme, and then determining the extent to which the scheme as a whole gives an adequate interpretation of all sorts of facts.

How would Whitehead reply to the attacks made on metaphysics by the logical positivists (see pp. 427–430)? Of course he has attempted to assimilate metaphysical and scientific method. But has he succeeded in showing that metaphysical statements conform to the verifiability criterion as conceived by the positivists? Carnap would point out that Whitehead never specifies any observable facts that (if encountered) would *disconfirm* his system, and he might go on to claim, with considerable plausibility, that Whitehead's metaphysical principles, like all others, are so constructed as to rule out the possibility that there is anything to which they do not apply. Can we imagine anything that could not be interpreted as either a single Whiteheadian actual occasion, a component of an actual occasion, or a society of occasions? The

theory is of such generality that when we "interpret" any field of experience in terms of it, for example, human relations, it doesn't lead us to expect one sort of observable facts rather than another. Anything that might conceivably happen in the sphere of human relations fits the theory as well as any other conceivable happening. This means that we cannot test (even partially) the adequacy of the theory by determining whether the actual facts are such as it would lead us to expect.

Even if Whitehead were to admit all this, he still has something to say to the positivist. "Philosophy does not initiate interpretations. Its search for a rationalistic scheme is the search for more adequate criticism, and for more adequate justification, of the interpretations which we perforce employ."⁵ The question is not whether we shall have metaphysics, but whether our metaphysics will be implicit and uncriticized, or explicitly formulated and developed so as to satisfy rational criteria in whatever way that is possible. Whitehead finds these metaphysical interpretations implicit in every department of human thought and activity.* Here we shall be able to notice only the one that is most important for Whitehead's thought.

Whitehead devotes a great deal of his published work to discussions of the metaphysical presuppositions of science. This forms the main theme of *Science and the Modern World*, and it is touched on repeatedly in other books. With Whitehead's background in mathematics and physics this is not surprising. (Whitehead was not merely an onlooker in science. He developed a physical theory of relativity that has begun to be taken seriously by physicists as an alternative to Einstein's.) It is interesting that Whitehead is almost unique among today's leading philosophers in the way in which he tries to take account in his philosophizing of the content, as well as the methodology, of science. And, as he conceives the matter, philosophy does not merely take from science; in return it criticizes and illuminates scientific concepts and principles from the standpoint of its absolutely general scheme. "Thus one aim of philosophy is to challenge the half-truths constituting the scientific first principles."⁶

One of the formative factors in Whitehead's philosophical development was his attempt to find an alternative to the metaphysics he believed to be implicit in classical physics, which he termed "scientific materialism." According to this view, the physical universe, thought of as totally disconnected from the mental realm: (1) consists of bits of matter spread out in an absolute space and enduring through an absolute time so that each bit retains its identity as the same bit of matter through all its meanderings; (2) each of these particles has its essential character of mass, impenetrability, and so on, in itself, apart from its relations with other particles; it could be what it is even if there were no other particles for it to be related to; (3) each particle at any given instant has a unique position in space and time; (4) each instantaneous position is uniquely

* Of course, this reply has weight only if Whitehead can show that the presuppositions he cites really are *metaphysical* presuppositions. A positivist would probably say that the items listed below belong to the conceptual and methodological framework of science and that, although it is appropriate for a philosopher to concern himself with them, this does not justify the traditional metaphysical enterprise, even as described by Whitehead. Unfortunately we are unable to pursue this issue in more detail here.

determined by the previous position of all the particles in the same system, in accordance with definitely statable principles.

Now Whitehead was impressed by certain developments in contemporary physics that seemed to invalidate this scheme, in particular the following: (a) the shift from continuity to discreteness in atomic physics (for example, it seems that the energy emitted by an electron is always a multiple of a certain fixed, minimum quantity; we never find any amount between these multiples); (b) the shift from deterministic to probability laws in the same area. This is a consequence of Heisenberg's Indeterminacy Principle, according to which it is theoretically impossible simultaneously to determine with precision the position and velocity of a subatomic particle; (c) the breakdown of the category difference between space and time in relativity theory; in relativity theory, time is treated on a par with each of the three spatial dimensions. In the course of developing a scheme that would reflect these features of the new physics, as well as other areas of experience, better than scientific materialism, some of the main features of Whitehead's metaphysics emerged.

1. What is fundamental is process, rather than things that undergo process. The "final real things of which the world is made up" are "actual occasions," momentary happenings, not enduring hunks of matter that retain their identity through change. This is intimately connected with (c). For if time is no more different from a given spatial dimension than one spatial dimension is from another, then it is inadmissible to treat space and time as radically different, as is done in the traditional conception of substance. For according to that conception, to divide the space occupied by a thing is to divide the thing, but to divide the time occupied by a thing is not. Cut my camera in two and I have only half a camera. But suppose my camera lasted only two years instead of the four years it has lasted. This would not mean that I had only half a camera during those two years. The spatial extent of a physical substance is constitutive of its reality but not its temporal extent; it persists through time, while remaining wholly itself at any moment of its career. Now, if we refuse to use a double standard for space and time, we are led straight to the concept of an event or a happening as the ultimate unit. For the identity of an event (for example, a sneeze) is constituted by its duration as much as by its spatial spread. Consider half of the duration of a certain sneeze and you are considering only half the sneeze. A sneeze does not exist wholly at different moments. It exists, as a whole, only in the totality of its temporal spread. Time and space are coordinate for it.

2. Moreover, Whitehead conceived his actual occasions to be atomic. That is, each is a minimal, indivisible unit of becoming, in the sense that it is not made up of smaller happenings, each of which occupies a portion of its total duration. Although a larger unit (a "society") is made up of a succession of these minimal occurrences, there is no succession within each of the minimal occurrences. This feature of the scheme obviously reflects (a). Any change we can discern will be some multiple of the indivisible unit of change. "Time is a sheer succession of epochal durations." This notion of an entity that is a becoming, and occupies a temporal duration, without being a succession of shorter happenings, is a difficult one. In the attempt to formulate it, Whitehead was led into a number of paradoxes, a literary form to which he is not entirely averse. Within the actual occasion, "there is a becoming of continuity, but no continuity of becoming."

"Extensiveness becomes, but 'becoming' is not itself extensive." "The epochal duration is not realized via its successive parts, but is given with its parts." There is a strong resemblance between this notion and William James's concept of the "specious present."

3. These happenings are internally related; that is, the essential nature of each is made up of its interconnections with all the others, so that no one of them could conceivably be what it is, apart from all the others being what they are. From this point Whitehead derives his famous, and obscure, "denial of simple location." Since each happening is, via its connections with them, involved in the constitution of every other, it is, in some degree or other, present in every region of space-time, on the principle that a thing *is* where it works.

4. The exact character of each occasion is not due entirely to the other occasions to which it is related, as would be true on a deterministic scheme. It can be fully understood only by taking into account a certain spontaneity peculiar to it as that particular happening.

Whitehead's account of descriptive generalization is reminiscent of Stephen Pepper's "root-metaphor" conception of metaphysical method (see his book, *World Hypotheses*) in that both emphasize the way in which a metaphysician will take a set of concepts having an established application in a restricted field and attempt to give it a universal extension. This is an illuminating way of looking at the history of philosophy. We can see how Aristotle started from biological concepts of form, function, and potentiality; Spinoza from logical concepts of premise and conclusion; Hobbes from physical concepts of matter and space; Berkeley from psychological concepts of perception, ideas, and volitions. It is typical of the richer systems to embody more than one such generalization, to be nourished by roots sent back into more than one special domain. Thus, I could have said, with equal justification, that Aristotle started from art or from formal logic. Whitehead's system also is characterized by this overdetermination. We have already seen some of the ways in which he generalizes certain features of contemporary physics. The title bestowed by Whitehead himself, "The Philosophy of Organism," would suggest that biological categories were most prominent. And indeed his concept of a society of occasions owes much to biology. But I think it is beyond question that the chief root-metaphor is human feeling. It is by taking our immediate feelings as his model that Whitehead is able to give a concrete filling to the abstract scheme which we saw to come out of the criticism of scientific materialism. Each occasion is thought of as a process of feeling, though few of them are conscious as some human feelings are. The integral connections among occasions are interpreted as "prehensions" (apprehensions without the "ap"). That is, each occasion is connected with others by taking them as objects of its feelings, so that each occasion is present in all others as data for their feelings. To justify talk about unconscious feelings, Whitehead gives a penetrating account of what he terms feelings of the "withness of the body." These are the massive organic feelings, for example, of visceral functions, forming the background for our vividly conscious sensations. Pointing out that there is a continuous shading from conscious attention to visceral feelings, through a dim awareness that they are there as background, to a complete unconsciousness of them, Whitehead maintains that we must suppose the feelings are going on, even when completely excluded from conscious

attention. It is these feelings of the "withness of the body" that are taken as the chief model for "feelings in the mode of causal efficacy," which Whitehead thinks of as being fundamental in each actual occasion, and to which he refers in attempting to give an experiential basis for the concept of causality. Finally, the spontaneity that is an irreducible factor in the "concrescence" (coming to be) of an actual occasion is interpreted as the "subjective aim" of that occasion, the peculiar sort of unity of feeling at which it aims and which would constitute felt satisfaction for it. This means that the concepts in terms of which the detailed description of the constitution of an actual occasion will be given will be aesthetic concepts, in a broad sense of "aesthetics" in which it is considered to deal with the conditions of felt value, that is, the various dimensions in which experience can be more or less valuable, for example, orderliness, depth, contrast. In this regard the following autobiographical remark is of interest. "The effect of my wife upon my outlook on the world has been so fundamental, that it must be mentioned as an essential factor in my philosophic output. . . . Her vivid life has taught me that beauty, moral and aesthetic, is the aim of existence; and that kindness, and love, and artistic satisfaction are among its modes of attainment."⁸

When viewed most concretely, Whitehead's metaphysics is a panpsychism, based on a conviction that every existent is generically similar to a bit of human experience. Its nearest analogue in the history of philosophy is Leibniz's *Monadology*, from which it differs chiefly in treating the units as events rather than as timeless substances, and in converting Leibniz's "windowless" monads to a more modern style of architecture with glass all around.

I have said that Whitehead refuses on principle to argue for particular points in his system but, like most mortals, his adherence to principle is not undeviating. In particular, he occasionally slips into saying something in support of his panpsychism; since this is such a crucial point in the system, let us look briefly at what he says. His scattered remarks on this point range themselves under three main justifications. First, if we do not conceive all occasions as involving feeling, we will have no way of conceiving what things are *in themselves*. We shall be able to think of them only insofar as they exhibit certain abstract patterns, such as spatial relations. Second, the continuity of man with subhuman life, and of the simplest organisms with nonliving matter, makes it very plausible to suppose that the same generic features are present throughout nature, with differences of degree. Third, panpsychism is a more economical theory. We have to admit sentient entities in any event; our consciousness of ourselves leaves us no option on that point. Therefore, it gives us a more economical scheme to suppose that all other entities are the same sort of thing, differing only in complexity of development, rather than to posit a radically different sort of unit—namely, insentient matter.

Whitehead's metaphysical system culminates in a philosophical theology, the details of which are found below. Here I shall only point out some of its affinities. Whitehead belongs with those thinkers (for example, William James) who have championed the concept of a "finite" God. Whitehead's God fits smoothly into his metaphysical scheme. He is the dominant actual occasion—one that has a concrescence of infinite duration. This means that His becoming overlaps with that of all other actual occasions, and that God is therefore immediately related to

them all. But He is not all-powerful, nor is He credited with creating the world out of nothing. He is one of the factors within reality, engaged in *reciprocal* interactions with lesser actual occasions. The primary religious attitudes evoked by such a being are not speechless awe and wonder, but an active gratitude and devotion. Whitehead's God can use the service of His worshippers. He is doing what He can to bring about satisfactory fulfillments of the occasions of experience making up the world, but He is not omnipotent, and His benevolent designs will be more or less fully realized, depending on the use individual occasions (including those constituting human persons) make of their spontaneity. This sort of religious temper fits admirably the dynamic, open texture of the Whiteheadian philosophy.

W. P. A.

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Process and Reality

by **ALFRED NORTH WHITEHEAD**

Part One

Chapter I | SPECULATIVE PHILOSOPHY

SECTION I

This course of lectures is designed as an essay in Speculative Philosophy. Its first task must be to define “speculative philosophy,” and to defend it as a method productive of important knowledge.

Speculative Philosophy is the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted. By this notion of “interpretation” I mean that everything of which we are conscious, as enjoyed, perceived, willed, or thought, shall have the character of a particular instance of the general scheme. Thus the philosophical scheme should be coherent, logical, and, in respect to its interpretation, applicable and adequate. Here “applicable” means that some items of experience are thus interpretable, and “adequate” means that there are no items incapable of such interpretation.

“Coherence,” as here employed, means that the fundamental ideas, in terms of which the scheme is developed, presuppose each other so that in isolation they are meaningless. This requirement does not mean that they are definable in terms of each other; it means that what is indefinable in one such notion cannot be abstracted from its relevance to the other notions. It is the ideal of speculative philosophy that its fundamental notions shall not seem capable of abstraction from each other. In other words, it is presupposed that no entity can be conceived in complete abstraction from the system of the universe, and that it is the business of speculative philosophy to exhibit this truth. This character is its coherence.

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The term "logical" has its ordinary meaning, including "logical" consistency, or lack of contradiction, the definition of constructs in logical terms, the exemplification of general logical notions in specific instances, and the principles of inference. It will be observed that logical notions must themselves find their places in the scheme of philosophic notions.

It will also be noticed that this ideal of speculative philosophy has its rational side and its empirical side. The rational side is expressed by the terms "coherent" and "logical." The empirical side is expressed by the terms "applicable" and "adequate." But the two sides are bound together by clearing away an ambiguity which remains in the previous explanation of the term "adequate." The adequacy of the scheme over every item does not mean adequacy over such items as happen to have been considered. It means that the texture of observed experience, as illustrating the philosophic scheme, is such that all related experience must exhibit the same texture. Thus the philosophic scheme should be "necessary," in the sense of bearing in itself its own warrant of universality throughout all experience, provided that we confine ourselves to that which communicates with immediate matter of fact. But what does not so communicate is unknowable, and the unknowable is unknown;¹ and so this universality defined by "communication" can suffice.

This doctrine of necessity in universality means that there is an essence to the universe which forbids relationships beyond itself, as a violation of its rationality. Speculative philosophy seeks that essence.

SECTION II

Philosophers can never hope finally to formulate these metaphysical first principles. Weakness of insight and deficiencies of language stand in the way inexorably. Words and phrases must be stretched towards a generality foreign to their ordinary usage; and however such elements of language be stabilized as technicalities, they remain metaphors mutely appealing for an imaginative leap.

There is no first principle which is in itself unknowable, not to be captured by a flash of insight. But, putting aside the difficulties of language, deficiency in imaginative penetration forbids progress in any form other than that of an asymptotic approach to a scheme of principles, only definable in terms of the ideal which they should satisfy.

The difficulty has its seat in the empirical side of philosophy. Our datum is the actual world, including ourselves; and this actual world spreads itself for observation in the guise of the topic of our immediate experience. The elucidation of immediate experience is the sole justification for any thought;

1. This doctrine is a paradox. Indulging in a species of false modesty, "cautious" philosophers undertake its definition.

and the starting point for thought is the analytic observation of components of this experience. But we are not conscious of any clear-cut complete analysis of immediate experience, in terms of the various details which comprise its definiteness. We habitually observe by the method of difference. Sometimes we see an elephant, and sometimes we do not. The result is that an elephant, when present, is noticed. Facility of observation depends on the fact that the object observed is important when present, and sometimes is absent.

The metaphysical first principles can never fail of exemplification. We can never catch the actual world taking a holiday from their sway. Thus, for the discovery of metaphysics, the method of pinning down thought to the strict systematization of detailed discrimination, already effected by antecedent observation, breaks down. This collapse of the method of rigid empiricism is not confined to metaphysics. It occurs whenever we seek the larger generalities. In natural science this rigid method is the Baconian method of induction, a method which, if consistently pursued, would have left science where it found it. What Bacon omitted was the play of a free imagination, controlled by the requirements of coherence and logic. The true method of discovery is like the flight of an aeroplane. It starts from the ground of particular observation; it makes a flight in the thin air of imaginative generalization; and it again lands for renewed observation rendered acute by rational interpretation. The reason for the success of this method of imaginative rationalization is that, when the method of difference fails, factors which are constantly present may yet be observed under the influence of imaginative thought. Such thought supplies the differences which the direct observation lacks. It can even play with inconsistency; and can thus throw light on the consistent, and persistent, elements in experience by comparison with what in imagination is inconsistent with them. The negative judgment is the peak of mentality. But the conditions for the success of imaginative construction must be rigidly adhered to. In the first place, this construction must have its origin in the generalization of particular factors discerned in particular topics of human interest; for example, in physics, or in physiology, or in psychology, or in aesthetics, or in ethical beliefs, or in sociology, or in languages conceived as storehouses of human experience. In this way the prime requisite, that anyhow there shall be some important application, is secured. The success of the imaginative experiment is always to be tested by the applicability of its results beyond the restricted locus from which it originated. In default of such extended application, a generalization started from physics, for example, remains merely an alternative expression of notions applicable to physics. The partially successful philosophic generalization will, if derived from physics, find applications in fields of experience beyond physics. It will enlighten observation in those remote fields, so that general principles can be discerned as in process of illustration, which in the absence of the imaginative generalization are obscured by their persistent exemplification.

Thus the first requisite is to proceed by the method of generalization so that certainly there is some application; and the test of some success is application beyond the immediate origin. In other words, some synoptic vision has been gained.

In this description of philosophic method, the term "philosophic generalization" has meant "the utilization of specific notions, applying to a restricted group of facts, for the divination of the generic notions which apply to all facts."

In its use of this method natural science has shown a curious mixture of rationalism and irrationalism. Its prevalent tone of thought has been ardently rationalistic within its own borders, and dogmatically irrational beyond those borders. In practice such an attitude tends to become a dogmatic denial that there are any factors in the world not fully expressible in terms of its own primary notions devoid of further generalization. Such a denial is the self-denial of thought.

The second condition for the success of imaginative construction is unflinching pursuit of the two rationalistic ideals, coherence and logical perfection.

Logical perfection does not here require any detailed explanation. An example of its importance is afforded by the rôle of mathematics in the restricted field of natural science. The history of mathematics exhibits the generalization of special notions observed in particular instances. In any branches of mathematics, the notions presuppose each other. It is a remarkable characteristic of the history of thought that branches of mathematics developed under the pure imaginative impulse, thus controlled, finally receive their important application. Time may be wanted. Conic sections had to wait for eighteen hundred years. In more recent years, the theory of probability, the theory of tensors, the theory of matrices are cases in point.

The requirement of coherence is the great preservative of rationalistic sanity. But the validity of its criticism is not always admitted. If we consider philosophical controversies, we shall find that disputants tend to require coherence from their adversaries, and to grant dispensations to themselves. It has been remarked that a system of philosophy is never refuted; it is only abandoned. The reason is that logical contradictions, except as temporary slips of the mind—plentiful, though temporary—are the most gratuitous of errors; and usually they are trivial. Thus, after criticism, systems do not exhibit mere illogicalities. They suffer from inadequacy and incoherence. Failure to include some obvious elements of experience in the scope of the system is met by boldly denying the facts. Also while a philosophical system retains any charm of novelty, it enjoys a plenary indulgence for its failures in coherence. But after a system has acquired orthodoxy, and is taught with authority, it receives a sharper criticism. Its denials and its incoherences are found intolerable, and a reaction sets in

Incoherence is the arbitrary disconnection of first principles. In modern philosophy Descartes' two kinds of substance, corporeal and mental, illustrate incoherence. There is, in Descartes' philosophy, no reason why there should not be a one-substance world, only corporeal, or a one-substance world, only mental. According to Descartes, a substantial individual "requires nothing but itself in order to exist." Thus this system makes a virtue of its incoherence. But on the other hand, the facts seem connected, while Descartes' system does not; for example, in the treatment of the body-mind problem. The Cartesian system obviously says something that is true. But its notions are too abstract to penetrate into the nature of things.

SECTION III

In its turn every philosophy will suffer a deposition. But the bundle of philosophic systems expresses a variety of general truths about the universe, awaiting co-ordination and assignment of their various spheres of validity. Such progress in co-ordination is provided by the advance of philosophy; and in this sense philosophy has advanced from Plato onwards. According to this account of the achievement of rationalism, the chief error in philosophy is overstatement. The aim at generalization is sound, but the estimate of success is exaggerated. There are two main forms of such overstatement. One form is what I have termed elsewhere¹ the "fallacy of misplaced concreteness." This fallacy consists in neglecting the degree of abstraction involved when an actual entity is considered merely so far as it exemplifies certain categories of thought. There are aspects of actualities which are simply ignored so long as we restrict thought to these categories. Thus the success of a philosophy is to be measured by its comparative avoidance of this fallacy, when thought is restricted within its categories.

The other form of overstatement consists in a false estimate of logical procedure in respect to certainty, and in respect to premises. Philosophy has been haunted by the unfortunate notion that its method is dogmatically to indicate premises which are severally clear, distinct, and certain; and to erect upon those premises a deductive system of thought.

But the accurate expression of the final generalities is the goal of discussion and not its origin. Philosophy has been misled by the example of mathematics; and even in mathematics the statement of the ultimate logical principles is beset with difficulties, as yet insuperable.² The verification of a rationalistic scheme is to be sought in its general success, and not in the peculiar certainty, or initial clarity, of its first principles. In this connection

1. Cf. *Science and the Modern World*, Ch. III.

2. Cf. *Principia Mathematica*, by Bertrand Russell and A. N. Whitehead, Vol. I, Introduction and Introduction to the Second Edition. These introductory discussions are practically due to Russell, and in the second edition wholly so.

the misuse of the *ex absurdo* argument has to be noted; much philosophical reasoning is vitiated by it. The only logical conclusion to be drawn, when a contradiction issues from a train of reasoning, is that at least one of the premises involved in the inference is false. It is rashly assumed without further question that the peccant premise can at once be located. In mathematics this assumption is often justified, and philosophers have been thereby misled. But in the absence of a well-defined categoreal scheme of entities, issuing in a satisfactory metaphysical system, every premise in a philosophical argument is under suspicion.

Philosophy will not regain its proper status until the gradual elaboration of categoreal schemes, definitely stated at each stage of progress, is recognized as its proper objective. There may be rival schemes, inconsistent among themselves; each with its own merits and its own failures. It will then be the purpose of research to conciliate the differences. Metaphysical categories are not dogmatic statements of the obvious; they are tentative formulations of the ultimate generalities.

If we consider any scheme of philosophic categories as one complex assertion, and apply to it the logician's alternative, true or false, the answer must be that the scheme is false. The same answer must be given to a like question respecting the existing formulated principles of any science.

The scheme is true with unformulated qualifications, exceptions, limitations, and new interpretations in terms of more general notions. We do not yet know how to recast the scheme into a logical truth. But the scheme is a matrix from which true propositions applicable to particular circumstances can be derived. We can at present only trust our trained instincts as to the discrimination of the circumstances in respect to which the scheme is valid.

The use of such a matrix is to argue from it boldly and with rigid logic. The scheme should therefore be stated with the utmost precision and definiteness, to allow of such argumentation. The conclusion of the argument should then be confronted with circumstances to which it should apply.

The primary advantage thus gained is that experience is not interrogated with the benumbing repression of common sense. The observation acquires an enhanced penetration by reason of the expectation evoked by the conclusion of the argument. The outcome from this procedure takes one of three forms: (i) the conclusion may agree with the observed facts; (ii) the conclusion may exhibit general agreement, with disagreement in detail; (iii) the conclusion may be in complete disagreement in the facts.

In the first case, the facts are known with more adequacy and the applicability of the system to the world has been elucidated. In the second case, criticisms of the observation of the facts and of the details of the scheme are both required. The history of thought shows that false interpretations of observed facts enter into the records of their observation. Thus both theory, and received notions as to fact, are in doubt. In the third case a fundamental

reorganization of theory is required either by way of limiting it to some special province, or by way of entire abandonment of its main categories of thought.

SECTION IV

The field of a special science is confined to one genus of facts, in the sense that no statements are made respecting facts which lie outside that genus. The very circumstance that a science has naturally arisen concerning a set of facts secures that facts of that type have definite relations among themselves which are very obvious to all mankind. The common obviousness of things arises when their explicit apprehension carries immediate importance for purposes of survival, or of enjoyment—that is to say, for purposes of “being” and of “well-being.” Elements in human experience, singled out in this way, are those elements concerning which language is copious and, within its limits, precise. The special sciences, therefore, deal with topics which lie open to easy inspection and are readily expressed by words.

The study of philosophy is a voyage towards the larger generalities. For this reason in the infancy of science, when the main stress lay in the discovery of the most general ideas usefully applicable to the subject-matter in question, philosophy was not sharply distinguished from science. To this day, a new science with any substantial novelty in its notions is considered to be in some way peculiarly philosophical. In their later stages, apart from occasional disturbances, most sciences accept without question the general notions in terms of which they develop. The main stress is laid on the adjustment and the direct verification of more special statements. In such periods scientists repudiate philosophy; Newton, justly satisfied with his physical principles, disclaimed metaphysics.

The fate of Newtonian physics warns us that there is a development in scientific first principles, and that their original forms can only be saved by interpretations of meaning and limitations of their field of application—interpretations and limitations unsuspected during the first period of successful employment. One chapter in the history of culture is concerned with the growth of generalities. In such a chapter it is seen that the older generalities, like the older hills, are worn down and diminished in height, surpassed by younger rivals.

Thus one aim of philosophy is to challenge the half-truths constituting the scientific first principles. The systematization of knowledge cannot be conducted in watertight compartments. All general truths condition each other; and the limits of their application cannot be adequately defined apart from their correlation by yet wider generalities. The criticism of principles must chiefly take the form of determining the proper meanings to be assigned to the fundamental notions of the various sciences, when these notions

are considered in respect to their status relatively to each other. The determination of this status requires a generality transcending any special subject-matter.

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SECTION V

Every science must devise its own instruments. The tool required for philosophy is language. Thus philosophy redesigns language in the same way that, in a physical science, pre-existing appliances are redesigned. It is exactly at this point that the appeal to facts is a difficult operation. This appeal is not solely to the expression of the facts in current verbal statements. The adequacy of such sentences is the main question at issue. It is true that the general agreement of mankind as to experienced facts is best expressed in language. But the language of literature breaks down precisely at the task of expressing in explicit form the larger generalities—the very generalities which metaphysics seeks to express.

The point is that every proposition refers to a universe exhibiting some general systematic metaphysical character. Apart from this background, the separate entities which go to form the proposition, and the proposition as a whole, are without determinate character. Nothing has been defined, because every definite entity requires a systematic universe to supply its requisite status. Thus every proposition proposing a fact must, in its complete analysis, propose the general character of the universe required for that fact. There are no self-sustained facts, floating in nonentity. This doctrine, of the impossibility of tearing a proposition from its systematic context in the actual world, is a direct consequence of the fourth and the twentieth of the fundamental categoreal explanations which we shall be engaged in expanding and illustrating. A proposition can embody partial truth because it only demands a certain type of systematic environment, which is presupposed in its meaning. It does not refer to the universe in all its detail.

One practical aim of metaphysics is the accurate analysis of propositions; not merely of metaphysical propositions, but of quite ordinary propositions such as "There is beef for dinner today," and "Socrates is mortal." The one genus of facts which constitutes the field of some special science requires some common metaphysical presupposition respecting the universe. It is merely credulous to accept verbal phrases as adequate statements of propositions. The distinction between verbal phrases and complete propositions is one of the reasons why the logicians' rigid alternative, "true or false," is so largely irrelevant for the pursuit of knowledge.

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For example, the word "Socrates," referring to the philosopher, in one sentence may stand for an entity presupposing a more closely defined background than the word "Socrates," with the same reference, in another

sentence. The word "mortal" affords an analogous possibility. A precise language must await a completed metaphysical knowledge.

The technical language of philosophy represents attempts of various schools of thought to obtain explicit expression of general ideas presupposed by the facts of experience. It follows that any novelty in metaphysical doctrines exhibits some measure of disagreement with statements of the facts to be found in current philosophical literature. The extent of disagreement measures the extent of metaphysical divergence. It is, therefore, no valid criticism on one metaphysical school to point out that its doctrines do not follow from the verbal expression of the facts accepted by another school. The whole contention is that the doctrines in question supply a closer approach to fully expressed propositions.

SECTION VI

It has been an objection to speculative philosophy that it is overambitious. Rationalism, it is admitted, is the method by which advance is made within the limits of particular sciences. It is, however, held that this limited success must not encourage attempts to frame ambitious schemes expressive of the general nature of things.

One alleged justification of this criticism is ill-success: European thought is represented as littered with metaphysical systems, abandoned and unreconciled.

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But the main objection, dating from the sixteenth century and receiving final expression from Francis Bacon, is the uselessness of philosophic speculation. The position taken by this objection is that we ought to describe detailed matter of fact, and elicit the laws with a generality strictly limited to the systematization of these described details. General interpretation, it is held, has no bearing upon this procedure; and thus any system of general interpretation, be it true or false, remains intrinsically barren. Unfortunately for this objection, there are no brute, self-contained matters of fact, capable of being understood apart from interpretation as an element in a system. Whenever we attempt to express the matter of immediate experience, we find that its understanding leads us beyond itself, to its contemporaries, to its past, to its future, and to the universals in terms of which its definiteness is exhibited. But such universals, by their very character of universality, embody the potentiality of other facts with variant types of definiteness. Thus the understanding of the immediate brute fact requires its metaphysical interpretation as an item in a world with some systematic relation to it. When thought comes upon the scene, it finds the interpretations as matters of practice. Philosophy does not initiate interpretations. Its search for a rationalistic scheme is the search for more adequate criticism, and for more adequate justification, of the interpretations which we perforce employ. Our

habitual experience is a complex of failure and success in the enterprise of interpretation. If we desire a record of uninterpreted experience, we must ask a stone to record its autobiography. Every scientific memoir in its record of the "facts" is shot through and through with interpretation. The methodology of rational interpretation is the product of the fitful vagueness of consciousness. Elements which shine with immediate distinctness, in some circumstances, retire into penumbral shadow in other circumstances, and into black darkness on other occasions. And yet all occasions proclaim themselves as actualities within the flux of a solid world, demanding a unity of interpretation.

Philosophy frees itself from the taint of ineffectiveness by its close relations with religion and with science, natural and sociological. It attains its chief importance by fusing the two, namely, religion and science, into one rational scheme of thought. Religion should connect the rational generality of philosophy with the emotions and purposes springing out of existence in a particular society, in a particular epoch, and conditioned by particular antecedents. Religion is the translation of general ideas into particular thoughts, particular emotions, and particular purposes; it is directed to the end of stretching individual interest beyond its self-defeating particularity. Philosophy finds religion, and modifies it; and conversely religion is among the data of experience which philosophy must weave into its own scheme. Religion is an ultimate craving to infuse into the insistent particularity of emotion that non-temporal generality which primarily belongs to conceptual thought alone. In the higher organisms the differences of tempo between the mere emotions and the conceptual experiences produce a life-tedium, unless this supreme fusion has been effected. The two sides of the organism require a reconciliation in which emotional experiences illustrate a conceptual justification, and conceptual experiences find an emotional illustration.

Chapter II | THE CATEGOREAL SCHEME

SECTION I

This chapter contains an anticipatory sketch of the primary notions which constitute the philosophy of organism. The whole of the subsequent discussion in these lectures has the purpose of rendering this summary intelligible, and of showing that it embodies generic notions inevitably presupposed in our reflective experience—presupposed, but rarely expressed in explicit distinction. Four notions may be singled out from this summary, by reason of the fact that they involve some divergence from antecedent philosophical thought. These notions are, that of an "actual entity," that of a "prehension," that of a "nexus," and that of the "ontological principle." Philosophical thought has made for itself difficulties by dealing exclusively in

very abstract notions, such as those of mere awareness, mere private sensation, mere emotion, mere purpose, mere appearance, mere causation. These are the ghosts of the old "faculties," banished from psychology, but still haunting metaphysics. There can be no "mere" togetherness of such abstractions. The result is that philosophical discussion is enmeshed in the fallacy of "misplaced concreteness."¹ In the three notions—actual entity, prehension, nexus—an endeavour has been made to base philosophical thought upon the most concrete elements in our experience.

"Actual entities"—also termed "actual occasions"—are the final real things of which the world is made up. There is no going behind actual entities to find anything more real. They differ among themselves: God is an actual entity, and so is the most trivial puff of existence in far-off empty space. But, though there are gradations of importance, and diversities of function, yet in the principles which actuality exemplifies all are on the same level. The final facts are, all alike, actual entities; and these actual entities are drops of experience, complex and interdependent.

In its recurrence to the notion of a plurality of actual entities the philosophy of organism is through and through cartesian. The "ontological principle" broadens and extends a general principle laid down by John Locke in his *Essay* (Bk. II, Ch. XXIII, Sect. 7), when he asserts that "power" is "a great part of our complex ideas of substances." The notion of "substance" is transformed into that of "actual entity"; and the notion of "power" is transformed into the principle that the reasons for things are always to be found in the composite nature of definite actual entities—in the nature of God for reasons of the highest absoluteness, and in the nature of definite temporal actual entities for reasons which refer to a particular environment. The ontological principle can be summarized as: no actual entity, then no reason.

Each actual entity is analysable in an indefinite number of ways. In some modes of analysis the component elements are more abstract than in other modes of analysis. The analysis of an actual entity into "prehensions" is that mode of analysis which exhibits the most concrete elements in the nature of actual entities. This mode of analysis will be termed the "division" of the actual entity in question. Each actual entity is "divisible" in an indefinite number of ways, and each way of "division" yields its definite quota of prehensions. A prehension reproduces in itself the general characteristics of an actual entity: it is referent to an external world, and in this sense will be said to have a "vector character"; it involves emotion, and purpose, and valuation, and causation. In fact, any characteristic of an actual entity is reproduced in a prehension. It might have been a complete actuality; but, by reason of a certain incomplete partiality, a prehension is only a subordinate element in an actual entity. A reference to the complete actuality is required to give the reason why such a prehension is what it is in respect to its subjective form. This subjective form is determined by the subjective aim at

1. Cf. my *Science and the Modern World*, Ch. III.

further integration, so as to obtain the "satisfaction" of the completed subject. In other words, final causation and atomism are interconnected philosophical principles.

With the purpose of obtaining a one-substance cosmology, "prehensions" are a generalization from Descartes' mental "cogitations," and from Locke's "ideas," to express the most concrete mode of analysis applicable to every grade of individual actuality. Descartes and Locke maintained a two-substance ontology—Descartes explicitly, Locke by implication. Descartes, the mathematical physicist, emphasized his account of corporeal substance; and Locke, the physician and the sociologist, confined himself to an account of mental substance. The philosophy of organism, in its scheme for one type of actual entities, adopts the view that Locke's account of mental substance embodies, in a very special form, a more penetrating philosophic description than does Descartes' account of corporeal substance. Nevertheless, Descartes' account must find its place in the philosophic scheme. On the whole, this is the moral to be drawn from the *Monadology* of Leibniz. His monads are best conceived as generalizations of contemporary notions of mentality. The contemporary notions of physical bodies only enter into his philosophy subordinately and derivatively. The philosophy of organism endeavours to hold the balance more evenly. But it does start with a generalization of Locke's account of mental operations.

Actual entities involve each other by reason of their prehensions of each other. There are thus real individual facts of the togetherness of actual entities, which are real, individual, and particular, in the same sense in which actual entities and the prehensions are real, individual, and particular. Any such particular fact of togetherness among actual entities is called a "nexus" (plural form is written "nexūs"). The ultimate facts of immediate actual experience are actual entities, prehensions, and nexūs. All else is, for our experience, derivative abstraction.

Part Two

Chapter I | FACT AND FORM

SECTION III

Conversely, where there is no decision involving exclusion, there is no givenness. For example, the total multiplicity of Platonic forms is not "given." But in respect of each actual entity, there is givenness of such forms. The determinate definiteness of each actuality is an expression of a selection

from these forms. It grades them in a diversity of relevance. This ordering of relevance starts from those forms which are, in the fullest sense, exemplified, and passes through grades of relevance down to those forms which in some faint sense are proximately relevant by reason of contrast with actual fact. This whole gamut of relevance is "given," and must be referred to the decision of actuality.

The term "Platonic form" has here been used as the briefest way of indicating the entities in question. But these lectures are not an exegesis of Plato's writings; the entities in question are not necessarily restricted to those which he would recognize as "forms." Also the term "idea" has a subjective suggestion in modern philosophy, which is very misleading for my present purposes; and in any case it has been used in many senses and has become ambiguous. The term "essence," as used by the Critical Realists, also suggests their use of it, which diverges from what I intend. Accordingly, by way of employing a term devoid of misleading suggestions, I use the phrase "eternal object" for what in the preceding paragraph of this section I have termed a "Platonic form." Any entity whose conceptual recognition does not involve a necessary reference to any definite actual entities of the temporal world is called an "eternal object."

In this definition the "conceptual recognition" must of course be an operation constituting a real feeling belonging to some actual entity. The point is that the actual subject which is merely conceiving the eternal object is not thereby in direct relationship to some other actual entity, apart from any other peculiarity in the composition of that conceiving subject. This doctrine applies also to the primordial nature of God, which is his complete envisagement of eternal objects; he is not thereby directly related to the given course of history. The given course of history presupposes his primordial nature, but his primordial nature does not presuppose it.

An eternal object is always a potentiality for actual entities; but in itself, as conceptually felt, it is neutral as to the fact of its physical ingression in any particular actual entity of the temporal world. "Potentiality" is the correlative of "givenness." The meaning of "givenness" is that what *is* "given" might not have been "given"; and that what *is not* "given" *might have been* "given."

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It is evident that "givenness" and "potentiality" are both meaningless apart from a multiplicity of potential entities. These potentialities are the "eternal objects." Apart from "potentiality" and "givenness," there can be no nexus of actual things in process of supersession by novel actual things. The alternative is a static monistic universe, without unrealized potentialities; since "potentiality" is then a meaningless term.

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It is a contradiction in terms to assume that some explanatory fact can float into the actual world out of nonentity. Nonentity is nothingness. Every

explanatory fact refers to the decision and to the efficacy of an actual thing. The notion of "subsistence" is merely the notion of how eternal objects can be components of the primordial nature of God. This is a question for subsequent discussion (cf. Part V). But eternal objects, as in God's primordial nature, constitute the Platonic world of ideas.

There is not, however, one entity which is merely the *class* of all eternal objects. For if we conceive any class of eternal objects, there are additional eternal objects which presuppose that class but do not belong to it. For this reason, at the beginning of this section, the phrase the "multiplicity of Platonic forms" was used, instead of the more natural phrase the "class of Platonic forms." A multiplicity is a type of complex thing which has the unity derivative from some qualification which participates in each of its components severally; but a multiplicity has no unity derivative *merely* from its various components.

SECTION IV

The doctrine of the philosophy of organism is that, however far the sphere of efficient causation be pushed in the determination of components of a concrescence—its data, its emotions, its appreciations, its purposes, its phases of subjective aim—beyond the determination of these components there always remains the final reaction of the self-creative unity of the universe. This final reaction completes the self-creative act by putting the decisive stamp of creative emphasis upon the determinations of efficient cause. Each occasion exhibits its measure of creative emphasis in proportion to its measure of subjective intensity. The absolute standard of such intensity is that of the primordial nature of God, which is neither great nor small because it arises out of no actual world. It has within it no components which are standards of comparison. But in the temporal world for occasions of relatively slight experient intensity, their decisions of creative emphasis are individually negligible compared to the determined components which they receive and transmit. But the final accumulation of all such decisions—the decision of God's nature and the decisions of all occasions—constitutes that special element in the flux of forms in history, which is "given" and incapable of rationalization beyond the fact that within it every component which is determinable is internally determined.

The doctrine is, that each concrescence is to be referred to a definite free initiation and a definite free conclusion. The initial fact is macrocosmic, in the sense of having equal relevance to all occasions; the final fact is microcosmic, in the sense of being peculiar to that occasion. Neither fact is capable of rationalization, in the sense of tracing the antecedents which determine it. The initial fact is the primordial appetite, and the final fact is the decision of emphasis, finally creative of the "satisfaction."

SECTION V

The antithetical terms "universals" and "particulars" are the usual words employed to denote respectively entities which nearly, though not quite,¹ correspond to the entities here termed "eternal objects," and "actual entities." These terms, "universals" and "particulars," both in the suggestiveness of the two words and in their current philosophical use, are somewhat misleading. The ontological principle, and the wider doctrine of universal relativity, on which the present metaphysical discussion is founded, blur the sharp distinction between what is universal and what is particular. The notion of a universal is of that which can enter into the description of many particulars; whereas the notion of a particular is that it is described by universals, and does not itself enter into the description of any other particular. According to the doctrine of relativity which is the basis of the metaphysical system of the present lectures, both these notions involve a misconception. An actual entity cannot be described, even inadequately, by universals; because other actual entities do enter into the description of any one actual entity. Thus every so-called "universal" is particular in the sense of being just what it is, diverse from everything else; and every so-called "particular" is universal in the sense of entering into the constitutions of other actual entities. The contrary opinion led to the collapse of Descartes' many substances into Spinoza's one substance; to Leibniz's windowless monads with their pre-established harmony; to the sceptical reduction of Hume's philosophy—a reduction first affected by Hume himself, and re-issued with the most beautiful exposition by Santayana in his *Scepticism and Animal Faith*.

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All modern philosophy hinges round the difficulty of describing the world in terms of subject and predicate, substance and quality, particular and universal. The result always does violence to that immediate experience which we express in our actions, our hopes, our sympathies, our purposes, and which we enjoy in spite of our lack of phrases for its verbal analysis. We find ourselves in a buzzing² world, amid a democracy of fellow creatures; whereas, under some disguise or other, orthodox philosophy can only introduce us to solitary substances, each enjoying an illusory experience: "O Bottom, thou art changed! what do I see on thee?" The endeavour to interpret experience in accordance with the overpowering deliverance of common sense must bring us back to some restatement of Platonic realism, modified so as to avoid the pitfalls which the philosophical investigations of the seventeenth and eighteenth centuries have disclosed.

The true point of divergence is the false notion suggested by the con-

1. For example, prehensions and subjective forms are also "particulars."

2. This epithet is, of course, borrowed from William James.

trast between the natural meanings of the words "particular" and "universal." The "particular" is thus conceived as being just its individual self with no necessary relevance to any other particular. It answers to Descartes' definition of substance: "And when we conceive of substance, we merely conceive an existent thing which requires nothing but itself in order to exist."³ This definition is a true derivative from Aristotle's definition: A primary substance is "neither asserted of a subject nor present in a subject."⁴ We must add the title phrase of Descartes' *The Second Meditation*: "Of the Nature of the Human Mind; and that it is more easily known than the Body," together with his two statements: "... thought constitutes the nature of thinking substance," and "everything that we find in mind is but so many diverse forms of thinking."⁵ This sequence of quotations exemplifies the set of presuppositions which led to Locke's empiricism and to Kant's critical philosophy—the two dominant influences from which modern thought is derived. This is the side of seventeenth-century philosophy which is here discarded.

The principle of universal relativity directly traverses Aristotle's dictum, "(A substance) is not present in a subject." On the contrary, according to this principle an actual entity *is* present in other actual entities. In fact if we allow for degrees of relevance, and for negligible relevance, we must say that every actual entity is present in every other actual entity. The philosophy of organism is mainly devoted to the task of making clear the notion of "being present in another entity." This phrase is here borrowed from Aristotle: it is not a fortunate phrase, and in subsequent discussion it will be replaced by the term "objectification." The Aristotelian phrase suggests the crude notion that one actual entity is added to another *simpliciter*. This is not what is meant. One rôle of the eternal objects is that they are those elements which express how any one actual entity is constituted by its synthesis of other actual entities, and how that actual entity develops from the primary dative phase into its own individual actual existence, involving its individual enjoyments and appetitions. An actual entity is concrete because it is such a particular concrescence of the universe.

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Chapter IV | ORGANISMS AND ENVIRONMENT

SECTION III

... those eternal objects which will be classified under the name "sensa" constitute the lowest category of eternal objects. Such eternal objects do

3. Cf. *Principles of Philosophy*, Part I, 51.

4. Cf. *Aristotle* by W. D. Ross, Ch. II.

5. Cf. *Principles of Philosophy*, Part I, 53.

not express a manner of relatedness between other eternal objects. They are not contrasts, or patterns. *Sensa* are necessary as components in any actual entity, relevant in the realization of the higher grades. But a *sensum* does not, for its own realization, require any eternal object of a lower grade, though it does involve the potentiality of pattern and does gain access of intensity from some realization of status in some realized pattern. Thus a *sensum* requires, as a rescue from its shallowness of zero width, some selective relevance of wider complex eternal objects which include it as a component; but it does not involve the relevance of any eternal objects which it presupposes. Thus, in one sense, a *sensum* is simple; for its realization does not involve the concurrent realization of certain definite eternal objects, which are its definite simple components. But, in another sense, each *sensum* is complex; for it cannot be dissociated from its potentiality for ingression into *any* actual entity, and for its potentiality of contrasts and of patterned relationships with other eternal objects. Thus each *sensum* shares the characteristic common to all eternal objects, that it introduces the notion of the logical variable, in both forms, the unselective "any" and the selective "some."

It is possible that this definition of "*sensa*" excludes some cases of contrast which are ordinarily termed "*sensa*" and that it includes some emotional qualities which are ordinarily excluded. Its convenience consists in the fact that it is founded on a metaphysical principle, and not on an empirical investigation of the physiology of the human body.

Narrowness in the lowest category achieves such intensity as belongs to such experience, but fails by reason of deficiency of width. Contrast elicits depth, and only shallow experience is possible when there is a lack of patterned contrast. Hume notices the comparative failure of the higher faculty of imagination in respect to mere *sensa*. He exaggerates this comparative failure into a dogma of absolute inhibition to imagine a novel *sensum*; whereas the evidence which he himself adduces, of the imagination of a new shade of colour to fill a gap in a graduated scale of shades, show that a contrast between given shades can be imaginatively extended so as to generate the imagination of the missing shade. But Hume's example also shows that imagination finds its easiest freedom among the higher categories of eternal objects.

A pattern is in a sense simple: a pattern is the "manner" of a complex contrast abstracted from the specific eternal objects which constitute the "matter" of the contrast. But the pattern refers unselectively to any eternal objects with the potentiality of being elements in the "matter" of some contrast in that "manner."

A pattern and a *sensum* are thus both simple in the sense that neither involves other specified eternal objects in its own realization. The *manner* of a pattern is the individual essence of the pattern. But no individual essence is realizable apart from some of its potentialities of relationship, that is, apart from its relational essence. But a pattern lacks simplicity in another

sense, in which a *sensum* retains simplicity. The realization of a pattern necessarily involves the concurrent realization of a group of eternal objects capable of contrast in that pattern. The realization of the pattern is through the realization of this contrast. The realization might have occurred by means of another contrast in the same pattern; but some complex contrast in that pattern is required. But the realization of a *sensum* in its ideal shallowness of intensity, with zero width, does not require any other eternal object, other than its intrinsic apparatus of individual and relational essence; it can remain just itself, with its unrealized potentialities for patterned contrasts. An actual entity with this absolute narrowness has an ideal faintness of satisfaction, differing from the ideal zero of chaos, but equally impossible. For realization means ingression in an actual entity, and this involves the synthesis of all ingredients with data derived from a complex universe. Realization is ideally distinguishable from the ingression of contrasts, but not in fact.

The simplest grade of actual occasions must be conceived as experiencing a few *sensa*, with the minimum of patterned contrast. The *sensa* are then experienced emotionally, and constitute the specific feelings whose intensities sum up into the unity of satisfaction. In such occasions the process is deficient in its highest phases; the process is the slave to the datum. There is the individualizing phase of conformal feeling, but the origivative phases of supplementary and conceptual feelings, are negligible.

SECTION IV

According to this account, the experience of the simplest grade of actual entity is to be conceived as the unorigivative response to the datum with its simple content of *sensa*. The datum is simple, because it presents the objectified experiences of the past under the guise of simplicity. Occasions *A*, *B*, and *C* enter into the experience of occasion *M* as themselves experiencing *sensa* s_1 and s_2 unified by some faint contrast between s_1 and s_2 . Occasion *M* responsively feels *sensa* s_1 and s_2 as its own sensations. There is thus a transmission of sensation emotion from *A*, *B*, and *C* to *M*. If *M* had the wit of self-analysis, *M* would know that it felt its own *sensa*, by reason of a transfer from *A*, *B*, and *C* to itself. Thus the (unconscious) direct perception of *A*, *B*, and *C* is merely the causal efficacy of *A*, *B*, and *C* as elements in the constitution of *M*. Such direct perception will suffer from vagueness; for if *A*, *B*, and *C* tell the same tale with minor variation of intensity, the discrimination of *A*, and *B*, and *C* from each other will be irrelevant. There may thus remain a sense of the causal efficacy of actual presences, whose exact relationships in the external world are shrouded. Thus the experience of *M* is to be conceived as a quantitative emotion arising

from the contribution of *sensa* from *A*, *B*, and *C* and proportionately conformed to by *M*.

Generalizing from the language of physics, the experience of *M* is an intensity arising out of specific *sensa*, directed from *A*, *B*, *C*. There is in fact a directed influx from *A*, *B*, *C* of quantitative feeling, arising from specific forms of feeling. The experience has a vector character, a common measure of intensity, and specific forms of feelings conveying that intensity. If we substitute the term "energy" for the concept of a quantitative emotional intensity, and the term "form of energy" for the concept of "specific form of feeling," and remember that in physics "vector" means definite transmission from elsewhere, we see that this metaphysical description of the simplest elements in the constitution of actual entities agrees absolutely with the general principles according to which the notions of modern physics are framed. The "datum" in metaphysics is the basis of the vector-theory in physics; the quantitative satisfaction in metaphysics is the basis of the scalar localization of energy in physics; the "*sensa*" in metaphysics are the basis of the diversity of specific forms under which energy clothes itself. Scientific descriptions are, of course, entwined with the specific details of geometry and physical laws, which arise from the special order of the cosmic epoch in which we find ourselves. But the general principles of physics are exactly what we should expect as a specific exemplification of the metaphysics required by the philosophy of organism. It has been a defect in the modern philosophies that they throw no light whatever on any scientific principles. Science should investigate particular species, and metaphysics should investigate the generic notions under which those specific principles should fall. Yet, modern realisms have had nothing to say about scientific principles; and modern idealisms have merely contributed the unhelpful suggestion that the phenomenal world is one of the inferior avocations of the Absolute.

The direct perception whereby the datum in the immediate subject is inherited from the past can thus, under an abstraction, be conceived as the transference of throbs of emotional energy, clothed in the specific forms provided by *sensa*. Since the vagueness in the experient subject will veil the separate objectifications wherein there are individual contributions to the total satisfaction, the emotional energy in the final satisfaction wears the aspect of a total intensity capable of all gradations of ideal variation. But in its origin it represents the totality arising from the contributions of separate objects to that form of energy. Thus, having regard to its origin, a real atomic structure of each form of energy is discernible, so much from each objectified actual occasion; and only a finite number of actual occasions will be relevant.

This direct perception, characterized by mere subjective responsiveness and by lack of origination in the higher phases, exhibits the constitution of an actual entity under the guise of receptivity. In the language of causation, it describes the efficient causation operative in the actual world. In the

language of epistemology, as framed by Locke, it describes how the ideas of particular existents are absorbed into the subjectivity of the percipient and are the data for its experience of the external world. In the language of science, it describes how the quantitative intensity of localized energy bears in itself the vector marks of its origin, and the specialities of its specific forms; it also gives a reason for the atomic quanta to be discerned in the building up of a quantity of energy. In this way, the philosophy of organism—as it should—appeals to the facts.

SECTION V

The current accounts of perception are the stronghold of modern metaphysical difficulties. They have their origin in the same misunderstanding which led to the incubus of the substance-quality categories. The Greeks looked at a stone, and perceived that it was grey. The Greeks were ignorant of modern physics; but modern philosophers discuss perception in terms of categories derived from the Greeks.

The Greeks started from perception in its most elaborate and sophisticated form, namely, visual perception. In visual perception, crude perception is most completely made over by the originative phases in experience, phases which are especially prominent in human experience. If we wish to disentangle the two earlier prehensive phases—the receptive phases, namely, the datum and the subjective response—from the more advanced originative phases, we must consider what is common to all modes of perception, amid the bewildering variety of originative amplification.

On this topic I am content to appeal to Hume. He writes: "But my senses convey to me only the impressions of coloured points, disposed in a certain manner. If *the eye is sensible* of anything further, I desire it may be pointed out to me."¹ And again: "It is universally allowed by the writers on optics, that *the eye* at all times sees an equal number of physical points, and that a man on the top of a mountain has no larger an image presented to his senses, than when he is cooped up in the narrowest court or chamber."²

In each of these quotations Hume explicitly asserts that the *eye* sees. The conventional comment on such a passage is that Hume, for the sake of intelligibility, is using common forms of expression; that he is only really speaking of impressions on the mind; and that in the dim future, some learned scholar will gain reputation by emending "eye" into "ego." The reason for citing the passages is to enforce the thesis that the form of speech is literary and intelligible because it expresses the ultimate truth of animal perception. The ultimate momentary "ego" has as its datum the "eye as experiencing such and such sights." In the second quotation, the reference to the number of physical points is a reference to the excited area

1. Cf. *Treatise*, Part II, Sect. III. Italics not his.

2. Cf. Part III, Sect. IX.

on the retina. Thus the "eye as experiencing such and such sights" is passed on as a datum, from the cells of the retina, through the train of actual entities forming the relevant nerves, up to the brain. Any direct relation of eye to brain is entirely overshadowed by this intensity of indirect transmission. Of course this statement is merely a pale abstraction from the physiological theory of vision. But the physiological account does not pretend to be anything more than indirect inductive knowledge. The point here to be noticed is the immediate literary obviousness of "the eye as experiencing such and such sights." This is the very reason why Hume uses the expression in spite of his own philosophy. The conclusion, which the philosophy of organism draws, is that in human experience the fundamental fact of perception is the inclusion, in the datum, of the objectification of an antecedent part of the human body with such-and-such experiences. Hume agrees with this conclusion sufficiently well so as to argue from it, when it suits his purpose. He writes: "I would fain ask those philosophers, who found so much of their reasonings on the distinction of substance and accident, and imagine we have clear ideas of each, whether the idea of substance be derived from the impressions of sensation or reflection? If it be conveyed by our senses, I ask, which of them, and after what manner? If it be perceived by the eyes, it must be a colour; if by the ears, a sound; if by the palate, a taste; and so of the other senses."³

We can prolong Hume's list: the feeling of the stone is *in the hand*; the feeling of the food is the ache *in the stomach*; the compassionate yearning is *in the bowels*, according to biblical writers; the feeling of well-being is in the viscera *passim*; ill temper is the emotional tone derivative from the disordered liver.

In this list, Hume's and its prolongation, for some cases—as in sight, for example—the supplementary phase in the ultimate subject overbalances in importance the datum inherited from the eye. In other cases, as in touch, the datum of "the feeling in the hand" maintains its importance, however much the intensity, or even the character, of the feeling may be due to supplementation in the ultimate subject: this instance should be contrasted with that of sight. In the instance of the ache the stomach, as datum, is of chief importance, and the food though obscurely felt is secondary—at least, until the intellectual analysis of the situation due to the doctor, professional or amateur. In the instances of compassion, well-being, and ill temper, the supplementary feelings in the ultimate subject predominate, though there are obscure references to the bodily organs as inherited data.

This survey supports the view that the predominant basis of perception is perception of the various bodily organs, as passing on their experiences by channels of transmission and of enhancement. It is the accepted doctrine in physical science that a living body is to be interpreted according to what

3. Cf. Part I, Sect. VI.

is known of other sections of the physical universe. This is a sound axiom; but it is double-edged. For it carries with it the converse deduction that other sections of the universe are to be interpreted in accordance with what we know of the human body.

It is also a sound rule that all interpretation should be based upon a *vera causa*. Now the original reliance upon "the grey stone" has been shown by modern physics to be due to a misapprehension of a complex situation; but we have direct knowledge of the relationship of our central intelligence to our bodily feelings. According to this interpretation, the human body is to be conceived as a complex "amplifier"—to use the language of the technology of electromagnetism. The various actual entities, which compose the body, are so coordinated that the experiences of any part of the body are transmitted to one or more central occasions to be inherited with enhancements accruing upon the way, or finally added by reason of the final integration. The enduring personality is the historic route of living occasions which are severally dominant in the body at successive instants. The human body is thus achieving on a scale of concentrated efficiency a type of social organization, which with every gradation of efficiency constitutes the orderliness whereby a cosmic epoch shelters in itself intensity of satisfaction.

The crude aboriginal character of direct perception is inheritance. What is inherited is feeling-tone with evidence of its origin: in other words, vector feeling-tone. In the higher grades of perception vague feeling-tone differentiates itself into various types of *sensa*—those of touch, sight, smell, etc.—each transmuted into a definite prehension of tonal contemporary nexus by the final percipient.

SECTION VI

In principle, the animal body is only the more highly organized and immediate part of the general environment for its dominant actual occasion, which is the ultimate percipient. But the transition from without to within the body marks the passage from lower to higher grades of actual occasions. The higher the grade, the more vigorous and the more original is the enhancement from the supplementary phase. Pure receptivity and transmission gives place to the trigger-action of life whereby there is release of energy in novel forms. Thus the transmitted datum acquires *sensa* enhanced in relevance or even changed in character by the passage from the low-grade external world into the intimacy of the human body. The datum transmitted from the stone becomes the touch-feeling in the hand, but it preserves the vector-character of its origin from the stone. The touch-feeling in the hand with this vector origin from the stone is transmitted to the percipient in the brain. Thus the final perception is the perception of the stone through the touch in the hand. In this perception the stone is vague and faintly relevant in comparison with the hand. But, however dim, it is there.

In the transmission of inheritance from *A* to *B*, to *C*, to *D*, *A* is objectified by the eternal object *S* as a datum for *B*; where *S* is a sensum or a complex pattern of sensa. Then *B* is objectified for *C*. But the datum for *B* is thereby capable of some relevance for *C*, namely, *A* as objectified for *B* becomes reobjectified for *C*; and so on to *D*, and throughout the line of objectifications. Then for the ultimate subject *M* the datum includes *A* as thus transmitted, *B* as thus transmitted, and so on. The final objectifications for *M* are effected by a set *S*, of eternal objects which is a modification of the original group *S*. The modification consists partly in relegation of elements into comparative irrelevance, partly in enhancement of relevance for other elements, partly in supplementation by eliciting into important relevance some eternal objects not in the original *S*. Generally there will be vagueness in the distinction between *A*, and *B*, and *C*, and *D*, etc., in their function as components in the datum for *M*. Some of the line, *A* and *C* for instance, may stand out with distinctness by reason of some peculiar feat of original supplementation which retains its undimmed importance in subsequent transmission. Other members of the chain may sink into oblivion. For example, in touch there is a reference to the stone in contact with the hand, and a reference to the hand; but in normal, healthy, bodily operations the chain of occasions along the arm sinks into the background, almost into complete oblivion. Thus *M*, which has some analytic consciousness of its datum, is conscious of the feeling in its hand as the hand touches the stone. According to this account, perception in its primary form is consciousness of the causal efficacy of the external world by reason of which the percipient is a concrescence from a definitely constituted datum. The vector character of the datum is this causal efficacy.

Thus perception, in this primary sense, is perception of the settled world in the past as constituted by its feeling-tones, and as efficacious by reason of those feeling-tones. Perception, in this sense of the term, will be called "perception in the mode of causal efficacy." Memory is an example of perception in this mode. For memory is perception relating to the data from some historic route of ultimate percipient subjects *M*₁, *M*₂, *M*₃, etc., leading up to *M* which is the memorizing percipient.

SECTION VII

It is evident that "perception in the mode of causal efficacy" is not that sort of perception which has received chief attention in the philosophical tradition. Philosophers have disdained the information about the universe obtained through their visceral feelings, and have concentrated on visual feelings.

What we ordinarily term our visual perceptions are the result of the later stages in the concrescence of the percipient occasion. When we register in consciousness our visual perception of a grey stone, something more

than bare sight is meant. The "stone" has a reference to its past, when it could be used as missile if small enough, or as a seat if large enough. A "stone" has certainly a history, and probably a future. It is one of the elements in the actual world which has got to be referred to as an actual reason and not as an abstract potentiality. But we all know that the mere sight involved, in the perception of the grey stone, is the sight of a grey shape contemporaneous with the percipient, and with certain spatial relations to the percipient, more or less vaguely defined. Thus the mere sight is confined to the illustration of the geometrical perspective relatedness, of a certain contemporary spatial region, to the percipient, the illustration being effected by the mediation of "grey." The *sensum* "grey" rescues that region from its vague confusion with other regions.

Perception which merely, by means of a *sensum*, rescues from vagueness a contemporary spatial region, in respect to its spatial shape and its spatial perspective from the percipient, will be called "perception in the mode of presentational immediacy."

The definition, which has just been given, extends beyond the particular case of sight. The unravelling of the complex interplay between the two modes of perception—causal efficacy and presentational immediacy is one main problem of the theory of perception.¹ The ordinary philosophical discussion of perception is almost wholly concerned with this interplay, and ignores the two pure modes which are essential for its proper explanation. The interplay between the two modes will be termed "symbolic reference."

Such symbolic reference is so habitual in human experience that great care is required to distinguish the two modes. In order to find obvious examples of the pure mode of causal efficacy we must have recourse to the viscera and to memory; and to find examples of the pure mode of presentational immediacy we must have recourse to so-called "delusive" perceptions. For example, the image of a grey stone as seen in a mirror illustrates the space behind the mirror; the visual delusions arising from some delirium, or some imaginative excitement, illustrate surrounding spatial regions; analogously for the double-vision due to maladjustment of the eyes; the sight at night, of the stars and nebulae and Milky Way, illustrates vague regions of the contemporary sky; the feelings in amputated limbs illustrate spaces beyond the actual body; a bodily pain, referred to some part not the cause of the disorder, illustrates the painful region though not the pain-giving region. All these are perfectly good examples of the pure mode of presentational immediacy.

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1. Cf. my Barbour-Page lectures, *Symbolism, Its Meaning and Importance*, delivered at the University of Virginia, April, 1927, Macmillan. Another discussion of this question is there undertaken, with other illustrations. Cf. also Professor Norman Kemp Smith's *Prolegomena to an Idealist Theory of Knowledge*, Macmillan, 1924.

The account of perception in the pure mode of presentational immediacy, which has just been given, agrees absolutely with Descartes' doctrine of perception in general, so far as can be judged from his arguments which presuppose perception, and putting aside a few detached passages wherein he comes near to the doctrine of "objectification" and near to Locke's second doctrine of "ideas determined to particular existents." Anyhow, his conclusion immediately follows that, in perception, thus described, all that is perceived is that the object has extension and is implicated in a complex of extensive relatedness with the animal body of the percipient. Part of the difficulties of Cartesian philosophy, and of any philosophy which accepts this account as a complete account of perception, is to explain how we know more than this meagre fact about the world although our only avenue of direct knowledge limits us to this barren residuum. Also, if this be all that we perceive about the physical world, we have no basis for ascribing the origination of the mediating *sensa* to any functioning of the human body. We are thus driven to the Cartesian duality of substances, bodies and minds. Perception is to be ascribed to mental functioning in respect to the barren extensive universe. We have already done violence to our immediate conviction by thus thrusting the human body out of the story; for, as Hume himself declares, we know that we see *by our eyes*, and taste *by our palates*. But when we have gone so far, it is inevitable to take a further step, and to discard our other conviction that we are perceiving a world of actual things within which we find ourselves. For a barren, extensive world is not really what we mean. We thus reduce perceptions to consciousness of impressions on the mind, consisting of *sensa* with "manners" of relatedness. We then come to Hume, and to Kant. Kant's philosophy is an endeavour to retrieve some meaning for the two convictions which we have successively discarded. We have noted that Locke wavers in his account of perception, so that in the earlier portion of his *Essay* he agrees with Hume, and in the later portion with the philosophy of organism. We have also noted that Hume is inconsistent to the extent of arguing from a conviction which is discarded in his philosophy.

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Chapter X | PROCESS

SECTION I

That "all things flow" is the first vague generalization which the unsystematized, barely analysed, intuition of men has produced. It is the theme of some of the best Hebrew poetry in the Psalms; it appears as one

of the first generalizations of Greek philosophy in the form of the saying of Heraclitus; amid the later barbarism of Anglo-Saxon thought it reappears in the story of the sparrow flitting through the banquet hall of the Northumbrian king; and in all stages of civilization its recollection lends its pathos to poetry. Without doubt, if we are to go back to that ultimate, integral experience, unwarped by the sophistications of theory, that experience whose elucidation is the final aim of philosophy, the flux of things is one ultimate generalization around which we must weave our philosophical system.

At this point we have transformed the phrase, "all things flow," into the alternative phrase, "the flux of things." In so doing, the notion of the "flux" has been held up before our thoughts as one primary notion for further analysis. But in the sentence "all things flow," there are three words—and we have started by isolating the last word of the three. We move backward to the next word "things" and ask, What sort of things flow? Finally we reach the first word "all" and ask, What is the meaning of the "many" things engaged in this common flux, and in what sense, if any, can the word "all" refer to a definitely indicated set of these many things?

The elucidation of meaning involved in the phrase "all things flow," is one chief task of metaphysics.

But there is a rival notion, antithetical to the former. I cannot at the moment recall one immortal phrase which expresses it with the same completeness as the alternative notion has been rendered by Heraclitus. This other notion dwells on permanences of things—the solid earth, the mountains, the stones, the Egyptian Pyramids, the spirit of man, God.

The best rendering of integral experience, expressing its general form divested of irrelevant details, is often to be found in the utterances of religious aspiration. One of the reasons of the thinness of so much modern metaphysics is its neglect of this wealth of expression of ultimate feeling. Accordingly we find in the first two lines of a famous hymn a full expression of the union of the two notions in one integral experience:

Abide with me;
Fast falls the eventide.

Here the first line expresses the permanences, "abide," "me" and the "Being" addressed; and the second line sets these permanences amid the inescapable flux. Here at length we find formulated the complete problem of metaphysics. Those philosophers who start with the first line have given us the metaphysics of "substance"; and those who start with the second line have developed the metaphysics of "flux." But, in truth, the two lines cannot be torn apart in this way; and we find that a wavering balance between the two is a characteristic of the greater number of philosophers. Plato found his permanences in a static, spiritual heaven, and his flux in the entanglement of his forms amid the fluent imperfections of the physical world. Here

I draw attention to the word "imperfection." In any assertion as to Plato I speak under correction; but I believe that Plato's authority can be claimed for the doctrine that the things that flow are imperfect in the sense of "limited" and of "definitely exclusive of much that they might be and are not." The lines quoted from the hymn are an almost perfect expression of the direct intuition from which the main position of the Platonic philosophy is derived. Aristotle corrected his Platonism into a somewhat different balance. He was the apostle of "substance and attribute," and of the classificatory logic which this notion suggests. But, on the other side, he makes a masterly analysis of the notion of "generation." Aristotle in his own person expressed a useful protest against the Platonic tendency to separate a static spiritual world from a fluent world of superficial experience. The later Platonic schools stressed this tendency: just as the mediaeval Aristotelian thought allowed the static notions of Aristotle's logic to formulate some of the main metaphysical problems in terms which have lasted till today.

On the whole, the history of philosophy supports Bergson's charge that the human intellect "spatializes the universe"; that is to say, that it tends to ignore the fluency, and to analyse the world in terms of static categories. Indeed Bergson went further and conceived this tendency as an inherent necessity of the intellect. I do not believe this accusation; but I do hold that "spatialization" is the shortest route to a clear-cut philosophy expressed in reasonably familiar language. Descartes gave an almost perfect example of such a system of thought. The difficulties of Cartesianism with its three clear-cut substances, and with its "duration" and "measured time" well in the background, illustrate the result of the subordination of fluency. This subordination is to be found in the unanalysed longing of the hymn, in Plato's vision of heavenly perfection, in Aristotle's logical concepts, and in Descartes' mathematical mentality. Newton, that Napoleon of the world of thought, brusquely ordered fluency back into the world, regimented into his "absolute mathematical time, flowing equably without regard to anything external." He also gave it a mathematical uniform in the shape of his Theory of Fluxions.

At this point the group of seventeenth- and eighteenth-century philosophers practically made a discovery, which, although it lies on the surface of their writings, they only half-realized. The discovery is that there are two kinds of fluency. One kind is the concrescence which, in Locke's language, is "the real internal constitution of a particular existent." The other kind is the *transition* from particular existent to particular existent. This transition, again in Locke's language, is the "perpetually perishing" which is one aspect of the notion of time; and in another aspect the transition is the origination of the present in conformity with the "power" of the past.

The phrase "the real internal constitution of a particular existent," the description of the human understanding as a process of reflection upon data, the phrase "perpetually perishing," and the word "power" together with its elucidation are all to be found in Locke's *Essay*. Yet owing to the limited

scope of his investigation Locke did not generalize or put his scattered ideas together. This implicit notion of the two kinds of flux finds further unconscious illustration in Hume. It is all but explicit in Kant, though—as I think—misdescribed. Finally, it is lost in the evolutionary monism of Hegel and of his derivative schools. With all his inconsistencies, Locke is the philosopher to whom it is most useful to recur, when we desire to make explicit the discovery of the two kinds of fluency, required for the description of the fluent world. One kind is the fluency inherent in the constitution of the particular existent. This kind I have called “concrecence.” The other kind is the fluency whereby the perishing of the process, on the completion of the particular existent, constitutes that existent as an original element in the constitutions of other particular existents elicited by repetitions of process. This kind I have called “transition.” Concrecence moves towards its final cause, which is its subjective aim; transition is the vehicle of the efficient cause, which is the immortal past.

The discussion of how the actual particular occasions become original elements for a new creation is termed the theory of objectification. The objectified particular occasions together have the unity of a datum for the creative concrecence. But in acquiring this measure of connection, their inherent presuppositions of each other eliminate certain elements in their constitutions, and elicit into relevance other elements. Thus objectification is an operation of mutually adjusted abstraction, or elimination, whereby the many occasions of the actual world become one complex datum. This fact of the elimination by reason of synthesis is sometimes termed the perspective of the actual world from the standpoint of that concrecence. Each actual occasion defines its own actual world from which it originates. No two occasions can have identical actual worlds.

SECTION II

“Concrecence” is the name for the process in which the universe of many things acquires an individual unity in a determinate relegation of each item of the “many” to its subordination in the constitution of the novel “one.”

The most general term “thing”—or, equivalently, “entity”—means nothing else than to be one of the “many” which find their niches in each instance of concrecence. Each instance of concrecence *is itself* the novel individual “thing” in question. There are not “the concrecence” *and* the “novel thing”: when we analyse the novel thing we find nothing but the concrecence. “Actuality” means nothing else than this ultimate entry into the concrete, in abstraction from which there is mere nonentity. In other words, abstraction from the notion of “entry into the concrete” is a self-contradictory notion, since it asks us to conceive a thing as not a thing.

An instance of concrecence is termed an “actual entity”—or, equivalently,

an "actual occasion." There is not one completed set of things which are actual occasions. For the fundamental inescapable fact is the creativity in virtue of which there can be no "many things" which are not subordinated in a concrete unity. Thus a set of all actual occasions is by the nature of things a standpoint for another concrescence which elicits a concrete unity from those many actual occasions. Thus we can never survey the actual world except from the standpoint of an immediate concrescence which is falsifying the presupposed completion. The creativity in virtue of which any relative complete actual world is, by the nature of things, the datum for a new concrescence, is termed "transition." Thus, by reason of transition, "the actual world" is always a relative term, and refers to that basis of presupposed actual occasions which is a datum for the novel concrescence.

An actual occasion is analysable. The analysis discloses operations transforming entities which are individually alien, into components of a complex which is concretely one. The term "feeling" will be used as the generic description of such operations. We thus say that an actual occasion is a concrescence effected by a process of feelings.

A feeling can be considered in respect to (i) the actual occasions felt, (ii) the eternal objects felt, (iii) the feelings felt, and (iv) its own subjective forms of intensity. In the process of concrescence the diverse feelings pass on to wider generalities of integral feeling.

Such a wider generality is a feeling of a complex of feelings, including their specific elements of identity and contrast. This process of the integration of feeling proceeds until the concrete unity of feeling is obtained. In this concrete unity all indetermination as to the realization of possibilities has been eliminated. The many entities of the universe, including those originating in the concrescence itself, find their respective rôles in this final unity. This final unity is termed the "satisfaction." The "satisfaction" is the culmination of the concrescence into a completely determinate matter of fact. In any of its antecedent stages the concrescence exhibits sheer indetermination as to the nexus between its many components.

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SECTION V

To sum up: There are two species of process, macroscopic process, and microscopic process. The macroscopic process is the transition from attained actuality to actuality in attainment; while the microscopic process is the conversion of conditions which are merely real into determinate actuality. The former process effects the transition from the "actual" to the "merely real"; and the latter process effects the growth from the real to the actual. The former process is efficient; the latter process is teleological. The future is merely real, without being actual; whereas the past is a nexus of actualities. The actualities are constituted by their real genetic phases. The present is

the immediacy of teleological process whereby reality becomes actual. The former process provides the conditions which really govern attainment; whereas the latter process provides the ends actually attained. The notion of "organism" is combined with that of "process" in a twofold manner. The community of actual things is an organism; but it is not a static organism. It is an incompleteness in process of production. Thus the expansion of the universe in respect to actual things is the first meaning of "process"; and the universe in any stage of its expansion is the first meaning of "organism." In this sense, an organism is a nexus.

Secondly, each actual entity is itself only describable as an organic process. It repeats in microcosm what the universe is in macrocosm. It is a process proceeding from phase to phase, each phase being the real basis from which its successor proceeds towards the completion of the thing in question. Each actual entity bears in its constitution the "reasons" why its conditions are what they are. These "reasons" are the other actual entities objectified for it.

An "object" is a transcendent element characterizing that *definiteness* to which our "experience" has to conform. In this sense, the future has *objective* reality in the present, but no *formal* actuality. For it is inherent in the constitution of the immediate, present actuality that a future will supersede it. Also conditions to which that future must conform, including real relationships to the present, are really objective in the immediate actuality.

Thus each actual entity, although complete so far as concerns its microscopic process, is yet incomplete by reason of its objective inclusion of the macroscopic process. It really experiences a future which must be actual, although the completed actualities of that future are undetermined. In this sense, each actual occasion experiences its own objective immortality.

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Part Five

Chapter II | GOD AND THE WORLD

SECTION II

Apart from any reference to existing religions as they are, or as they ought to be, we must investigate dispassionately what the metaphysical principles, here developed, require on these points, as to the nature of God.

There is nothing here in the nature of proof. There is merely the confrontation of the theoretic system with a certain rendering of the facts. But the unsystematized report upon the facts is itself highly controversial, and the system is confessedly inadequate. The deductions from it in this particular sphere of thought cannot be looked upon as more than suggestions as to how the problem is transformed in the light of that system. What follows is merely an attempt to add another speaker to that masterpiece, Hume's *Dialogues Concerning Natural Religion*. Any cogency of argument entirely depends upon elucidation of somewhat exceptional elements in our conscious experience—those elements which may roughly be classed together as religious and moral intuitions.

In the first place, God is not to be treated as an exception to all metaphysical principles, invoked to save their collapse. He is their chief exemplification.

Viewed as primordial, he is the unlimited conceptual realization of the absolute wealth of potentiality. In this aspect, he is not *before* all creation, but *with* all creation. But, as primordial, so far is he from "eminent reality," that in this abstraction he is "deficiently actual"—and this in two ways. His feelings are only conceptual and so lack the fulness of actuality. Secondly, conceptual feelings, apart from complex integration with physical feelings, are devoid of consciousness in their subjective forms. •

Thus, when we make a distinction of reason, and consider God in the abstraction of a primordial actuality, we must ascribe to him neither fulness of feeling, nor consciousness. He is the unconditioned actuality of conceptual feeling at the base of things; so that, by reason of this primordial actuality, there is an order in the relevance of eternal objects to the process of creation. His unity of conceptual operations is a free creative act, untrammelled by reference to any particular course of things. It is deflected neither by love, nor by hatred, for what in fact comes to pass. The *particularities* of the actual world presuppose *it*; while *it* merely presupposes the *general* metaphysical character of creative advance, of which it is the primordial exemplification. The primordial nature of God is the acquirement by creativity of a primordial character.

His conceptual actuality at once exemplifies and establishes the categoreal conditions. The conceptual feelings, which compose his primordial nature, exemplify in their subjective forms their mutual sensitivity and their subjective unity of subjective aim. These subjective forms are valuations determining the relative relevance of eternal objects for each occasion of actuality.

He is the lure for feeling, the eternal urge of desire. His particular relevance to each creative act as it arises from its own conditioned standpoint in the world, constitutes him the initial "object of desire" establishing the initial phase of each subjective aim. A quotation from Aristotle's *Meta-*

*physics*¹ expresses some analogies to, and some differences from, this line of thought: "And since that which is moved and mover is intermediate, there is a mover which moves without being moved, being eternal, substance, and actuality. And the object of desire and the object of thought are the same. For the apparent good is the object of appetite, and the real good is the primary object of rational desire. But desire is consequent on opinion rather than opinion on desire; for the thinking is the starting point. And thought is moved by the object of thought, and one side of the list of opposites is in itself the object of thought; . . ." Aristotle had not made the distinction between conceptual feelings and the intellectual feelings which alone involve consciousness. But if "conceptual feeling," with its subjective form of valuation, be substituted for "thought," "thinking," and "opinion," in the above quotation, the agreement is exact.

SECTION III

There is another side to the nature of God which cannot be omitted. Throughout this exposition of the philosophy of organism we have been considering the primary action of God on the world. From this point of view, he is the principle of concretion—the principle whereby there is initiated a definite outcome from a situation otherwise riddled with ambiguity. Thus, so far, the primordial side of the nature of God has alone been relevant.

But God, as well as being primordial, is also consequent. He is the beginning and the end. He is not the beginning in the sense of being in the past of all members. He is the presupposed actuality of conceptual operation, in unison of becoming with every other creative act. Thus by reason of the relativity of all things, there is a reaction of the world on God. The completion of God's nature into a fulness of physical feeling is derived from the objectification of the world in God. He shares with every new creation its actual world; and the concrescent creature is objectified in God as a novel element in God's objectification of that actual world. This prehension into God of each creature is directed with the subjective aim, and clothed with the subjective form, wholly derivative from his all-inclusive primordial valuation. God's conceptual nature is unchanged, by reason of its final completeness. But his derivative nature is consequent upon the creative advance of the world.

Thus, analogously to all actual entities, the nature of God is dipolar. He has a primordial nature and a consequent nature. The consequent nature of God is conscious; and it is the realization of the actual world in the unity

1. Cf. *Metaphysics* 1072, trans. by Professor W. D. Ross. My attention was called to the appositeness of this particular quotation by Mr. F. J. Carson.

of his nature, and through the transformation of his wisdom. The primordial nature is conceptual, the consequent nature is the weaving of God's physical feelings upon his primordial concepts.

One side of God's nature is constituted by his conceptual experience. This experience is the primordial fact in the world, limited by no actuality which it presupposes. It is therefore infinite, devoid of all negative prehensions. This side of his nature is free, complete, primordial, eternal, actually deficient, and unconscious. The other side originates with physical experience derived from the temporal world, and then acquires integration with the primordial side. It is determined, incomplete, consequent, "everlasting," fully actual, and conscious. His necessary goodness expresses the determination of his consequent nature.

Conceptual experience can be infinite, but it belongs to the nature of physical experience that it is finite. An actual entity in the temporal world is to be conceived as originated by physical experience with its process of completion motivated by consequent, conceptual experience initially derived from God. God is to be conceived as originated by conceptual experience with his process of completion motivated by consequent, physical experience, initially derived from the temporal world.

SECTION IV

The perfection of God's subjective aim, derived from the completeness of his primordial nature, issues into the character of his consequent nature. In it there is no loss, no obstruction. The world is felt in a unison of immediacy. The property of combining creative advance with the retention of mutual immediacy is what in the previous section is meant by the term "everlasting."

The wisdom of subjective aim prehends every actuality for what it can be in such a perfected system—its sufferings, its sorrows, its failures, its triumphs, its immediacies of joy—woven by rightness of feeling into the harmony of the universal feeling, which is always immediate, always many, always one, always with novel advance, moving onward and never perishing. The revolts of destructive evil, purely self-regarding, are dismissed into their triviality of merely individual facts; and yet the good they did achieve in individual joy, in individual sorrow, in the introduction of needed contrast, is yet saved by its relation to the completed whole. The image—and it is but an image—the image under which this operative growth of God's nature is best conceived, is that of a tender care that nothing be lost.

The consequent nature of God is his judgment on the world. He saves the world as it passes into the immediacy of his own life. It is the judgment of a tenderness which loses nothing that can be saved. It is also the judgment of a wisdom which uses what in the temporal world is mere wreckage.

Another image which is also required to understand his consequent nature, is that of his infinite patience. The universe includes a threefold creative act composed of (i) the one infinite conceptual realization, (ii) the multiple solidarity of free physical realizations in the temporal world, (iii) the ultimate unity of the multiplicity of actual fact with the primordial conceptual fact. If we conceive the first term and the last term in their unity over against the intermediate multiple freedom of physical realizations in the temporal world, we conceive of the patience of God, tenderly saving the turmoil of the intermediate world by the completion of his own nature. The sheer force of things lies in the intermediate physical process: this is the energy of physical production. God's rôle is not the combat of productive force with productive force, of destructive force with destructive force; it lies in the patient operation of the overpowering rationality of his conceptual harmonization. He does not create the world, he saves it; or, more accurately, he is the poet of the world, with tender patience leading it by his vision of truth, beauty, and goodness.

Selected Bibliography

After *Principia Mathematica*, Cambridge, Cambridge University Press, 1910–1913, the great work on the logical foundations of mathematics that he coauthored with Bertrand Russell (see the Introduction to the section on Russell), Whitehead's first major philosophical work is to be found in a series of works on the philosophy of science published between 1919 and 1922. *An Enquiry Concerning the Principles of Natural Knowledge*, Cambridge, Cambridge University Press, 1919; and *The Concept of Nature*, Cambridge, Cambridge University Press, 1920, apply something like Russell's method of logical constructions to basic concepts of physical science, but with strangely discordant overtones that we can now see as foreshadowings of the later metaphysical system, and with an insistence on a kind of realism that is not to be found in Russell. It is in these books that Whitehead develops the famous "method of extensive abstraction" for constructing geometrical concepts. *The Principle of Relativity*, Cambridge, Cambridge University Press, 1922, contains both an exposition, in technical terms, of a theory of relativity that is an alternative to Einstein's, and a discussion of the philosophical issues involved. Whitehead's theory of relativity has only recently begun to be taken seriously by physicists and philosophers. See R. M. Palter, *Whitehead's Philosophy of Science*, Chicago, University of Chicago Press, 1960.

The Aims of Education and Other Essays, New York, The Macmillan Co., 1929, contains some shorter presentations of the philosophy of science from this period, as well as embodying the best formulations of Whitehead's views on education; *Science and the Modern World*, New York, The Macmillan Co., 1925; *Process and Reality*, New York, The Macmillan Co., 1929; and *Adventures of Ideas*, New York, The Macmillan Co., 1933, are the works in which Whitehead's metaphysical system is set forth. Of these, *Process and Reality* comes closest to a systematic presentation, although it too suffers from Whitehead's penchant for trying to say everything in each chapter. *Science and the Modern World* is ostensibly an intellectual history of the impact of science on modern thought, and the book does contain many wise and witty sayings on this topic; but as it goes on we find Whitehead slipping more and more of his system into each succeeding chapter. *Adventures of Ideas* also involves a mixture of the historical and the metaphysical, but here they are more nearly segregated. Section III of this book is probably the best relatively concise statement of Whitehead's metaphysics, but it is not very intelligible apart from the more discursive presentations given elsewhere. *Religion in the Making*, New York, The Macmillan Co., 1926; and *Symbolism, Its Meaning and Effect*, New York, The Macmillan Co., 1927, are valuable as developments of particular aspects of the system. *Modes of Thoughts*, New York, The Macmillan Co., 1938, Whitehead's last book, is a cryptic work, full of suggestive but undeveloped remarks. The essay, "Nature and Life," contained in this book is a relatively easy entree into the Whiteheadian philosophy. *Essays in Science and Philosophy*, New York, Philosophical Library, Inc., 1947, contains some interesting minor pieces, including some autobiographical material. *Alfred North Whitehead: An Anthology*, F. S. C. Northrop and M. Gross (eds.), New York, The Macmillan Co., 1953, is a compendious collection of portions of many of the above-mentioned works.

Several worthwhile booklength discussions of the Whiteheadian philosophy have appeared in recent years. In addition to Palter's work on the philosophy of science mentioned above, they include N. Lawrence, *Whitehead's Philosophical Development*, Berkeley, University of California Press, 1956, a study of what led up to *Process and Reality*; W. A. Christian, *An Interpretation of Whitehead's Metaphysics*, New Haven, Conn., Yale University Press, 1959; and I. Leclerc, *Whitehead's Metaphysics, An Introductory Exposition*, New York, The Macmillan Co., 1958. *The Relevance of Whitehead*, I. Leclerc (ed.), New York, The Macmillan Co., 1961, is a group of essays issued in commemoration of the centenary of Whitehead's birth. In *The Philosophy of Alfred North Whitehead*, P. A. Schilpp (ed.), New York, Tudor Publishing Co., 1951, the essays are for the most part below the level usually maintained by the Library of Living Philosophers, but the following are well worth reading: V. Lowe, "The Development of Whitehead's Philosophy"; A. E. Murphy, "Whitehead and the Method of Speculative Philosophy"; C. Hartshorne, "Whitehead's Idea of God." For some opposing views on a crucial aspect of Whiteheadian metaphysics, see W. P. Alston, "Internal Relatedness and Pluralism in Whitehead," *Review of Metaphysics*, 5 (1952-

1953), and I. Leclerc, "Internal Relatedness in Whitehead," *Review of Metaphysics*, 6 (1953-1954). C. Hartshorne, *Reality as Social Process*, New York, The Free Press of Glencoe, 1953, contains a further development of some Whiteheadian themes.

part



JOHN DEWEY

1859–1952

Introduction

The great triumvirate of American Pragmatism consists of Charles Sanders Peirce, William James, and John Dewey. Dewey, the youngest of the three, was born in Burlington, Vermont. He studied at the University of Vermont and at Johns Hopkins where he did his graduate work. At that time Peirce was an instructor in Philosophy at Hopkins. Dewey's teaching career was divided among three institutions: the University of Michigan, the University of Chicago, and Columbia University. For a professor, Dewey was unusually active in the social and political events of his time. He went to China by invitation, and there he made a profound impression on some intellectuals who were restive under the old ways of looking at things. In Dewey's instrumentalism they saw a living alternative method for tackling the immense social and political problems of China. Had there been enough of these younger Chinese and had the conditions in China made it possible for them to gain political control, China might have found a democratic alternative to the Kuomintang and Mao. Dewey also visited Russia; he wanted to see for himself. He did not like what he saw, and he did not hesitate to publish his opinions. The Soviets have never forgiven him. During the notorious Bertrand Russell case at City College, Dewey at once came to Russell's defense and continued to support him throughout the whole sordid affair.¹

Among the general public Dewey's fame rests

perhaps on his overwhelming and decisive influence on American education. The theory of education in vogue in American teacher training institutions has been what the professors of education think is Dewey's theory. The people so trained have come to play a dominant role in secondary education in the United States. As a result the teaching in practice is directly conditioned by Dewey's influence on American pedagogues. There are those who are not sure that were Dewey alive, he would condone the theory and practice of education defended in his name. The debate over the merits of progressive education is one of the vital practical issues of the current American scene. But it is not here that we can locate Dewey's distinctive claim to a place of importance among twentieth-century philosophers.

From a technical point of view, Dewey's distinctive contribution to philosophy is in his conception of inquiry, his esthetics, his metaphysics, and his theory of value. They are all of one piece. They reflect a consistent although not a clearly and completely worked out scientific naturalism. Dewey did not begin as a scientific naturalist. He was a Hegelian idealist until about 1895. This orientation may be attributed to three factors. Dewey came from Calvinistic stock. The intellectual atmosphere in the United States during Dewey's student days was predominantly religious and theological. The teacher who influenced Dewey most was George Sylvester Morris, a Hegelian. Morris continued to influence Dewey when the two were colleagues at the University of Michigan.

But there were other influences that overpowered the earlier ones and led Dewey to develop the position for which he is famous. Concomitant with economic expansion, science and technology gradually displaced theology as the dominant intellectual outlook. Under the dominance of the theological outlook, philosophy had been the apologist of religion. Now philosophy became allied to science. This period in the nineteenth century saw the rise of Darwinism, experimental physiology, experimental psychology, physical and cultural anthropology, social psychology, sociology, Marxism, and two very important developments in physics, the kinetic theory of gases and the laws of thermodynamics.

The nineteenth-century developments in the biological, social, and physical sciences opened the way to a new philosophy of science. The post-Kantian idealists, following Hegel, had made a sharp distinction between the *Naturwissenschaften* (the natural sciences) and the *Geisteswissenschaften* (the study of the spirit, human or the Absolute). Each of these domains was thought to have its own distinctive method. The new physics, the new biology, and the new social sciences all seemed to have a common logic—the logic of statistics and probability. There seemed to be no methodological apartheid between the physical on the one hand, and the biological, psychological, and social on the other hand. Pierce undertook a detailed investigation of the logic of science. He not only worked out a formal logic of statistics and probability but also set forth a conception of *meaning*, a conception of *truth*, and a conception of *belief* which together determined the general character of Pragmatism. James and Dewey agreed with the general outline of Peirce's conceptions, but each of them developed and applied the three central concepts in their own individual ways.

In *Popular Science Monthly* Peirce published his now famous article "How to Make Our Ideas Clear."² The meaning in the sense of the *intellectual purport*

of an idea is to be explicated as follows: "Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object." What, for example, do we mean when we say that something is hard? "Evidently that it will not be scratched by many other substances." This conception of meaning is essentially one with operationalism and the positivistic verifiability theory of "cognitive" (intellectual) meaning (see the introduction to *Logical Positivism*, pp. 385–386). In *Collected Papers*³ Peirce defines truth as that upon which the community of investigators would agree in the long run. Dewey says that this is "the best definition of *truth* from the logical standpoint which is known to me."⁴ This definition of truth accords with two influences that worked on Peirce. The first is J. S. Mill's *On Liberty* in which Mill bases the case for freedom of inquiry on the proposition that in no other way than free and public inquiry can human intelligence ever hope to gain truth and avoid error. The second is Darwinism's idea of the survival of the fittest. The true is that which is fittest to believe and the fittest is that which survives the long-run investigations of the community of inquirers. This definition of truth rules out in principle the Cartesian method of inquiry according to which the ultimate certainties on which the whole of knowledge is to be based are discerned by the private intellectual intuition of the inquiring mind. Here, in capsule form, is Peirce's theory of belief. To be disposed to act in certain ways is not just the test or criterion of having a certain belief. It is identical with having that belief. This conception originated with Alexander Bain, the Scottish philosopher.⁵ No one, to my knowledge, has succeeded in showing in detail how to reduce beliefs to dispositions to act. The idea is that to believe, for example, that Route 1 leads from here to Boston is to be disposed to follow Route 1 from here if I want to go to Boston by car. But to this it has been objected that I am at best disposed to follow what I *believe* is Route 1; and thus *belief* has, after all, not been got rid of in the analysis.

These three conceptions—central to pragmatism, meaning, truth, and belief—were developed under the impact of science and were justified insofar as they seemed to be faithful to the nature of science. Modern science has been described as "an interconnected series of concepts and conceptual schemes that have developed as a result of experimentation and observation and are fruitful of further experimentation and observations."⁶ This dynamic conception of science makes of it an activity involving intelligent guesswork and testing of the guesses (hypotheses) by controlled experimentation to see if the predictions of the hypotheses are borne out; the activities yield well-substantiated statements that in turn become instruments of further inquiry. Scientific knowledge becomes identical with the results of scientific inquiry and this by its very nature is thought of as a never-ending activity carried on by the community of inquirers. All of these ingredients may be found in Dewey's philosophy.

Darwinism influenced the metaphysics of pragmatism as well as its theory of method. One of the radical novelties of Darwin's theory of evolution was the idea of the continuity of man and other forms of life. The human mind could now be conceived as an emergent capacity in principle understandable in purely naturalistic terms. Knowledge, as product, was warranted belief; warranted belief was the product of inquiry; to inquire was to act in certain ways

in certain situations, and to believe was to be disposed to act in certain ways in certain situations. There were no mysterious inner goings on to be a basis for contrasting mentality with lack of it. There was no dualism of mind and matter; no dualism of nature and supernature; and no dualism of method.

Dewey's theory of inquiry is central in his philosophy. He is describing what he takes to be the common and peculiar features of inquiry in the generic sense. "Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole." What Dewey means by "situation" is not precisely clear. This much seems to be involved in a situation: (a) an experiencing organism and (b) an experienced whole of which "an object or event is always a special part, phase or aspect." A situation is indeterminate if it is *confused* (its outcome cannot be anticipated) or *obscure* (when its course of movement permits of final consequences that cannot be clearly made out) or *conflicting* (when it tends to evoke discordant responses).

To transform an indeterminate situation into a determinate one we need two kinds of procedures. One is *reasoning*. Roughly, we start from a hunch, suggested by the indeterminate situation; the hunch is formulated as a proposition; its consequences are drawn out until we reach some consequences that can be put to the test. The other procedure is distinguishable but not separable from reasoning. It consists of gathering the relevant facts by observing. These facts serve to clarify the nature of the problem in the indeterminate situation and they also serve as evidence for or against the effectiveness of the operations prescribed by our hunches. The propositions become settled *judgments* (settled but not incorrigible) if their consequences are supported by the evidence. Settled judgment alone can constitute knowledge. Hence it is a mistake to talk of knowledge by acquaintance or immediate knowledge, be it the immediacy of sense or that of mystic experience. The immediately presented is no more an item of knowledge than the immediately enjoyed is a genuine good.

At this point, let us recall that brief characterization given above of Peirce's conception of the "intellectual purport" or meaning of an "idea." To some extent in Peirce and more so in James there is a tendency to soften the requirement that the only "intellectually meaningful ideas" are those that can be directly or indirectly checked by sense-experience. The "practical bearings" that are said to determine the content of "ideas" are made to include more than perceptual items. There is none of this softness in Dewey. In this he is closer to logical positivism and operationalism than either Peirce or James.

In James's case it is easy to see why he had a softer version of "practical bearings" alongside the positivistic one. James had a tenderness for religion and old-fashioned metaphysics neither of which, as the positivists and Dewey saw, could have "intellectual content" if "practical bearings" were restricted to sense perception. Dewey, on the other hand, has no use for religion and old-fashioned metaphysics.

The differences with respect to "practical bearings" have further consequences. In 1896 James published "The Will to Believe," an essay defending religious belief not, however, on the grounds that religious belief is the product of inquiry in Dewey's sense. Indeed, James assumes that religious beliefs are

unverifiable. James's grounds are that by *willfully* believing some people in some carefully specified circumstances would stand to gain certain "vital goods even in this life" while they would stand to lose nothing even if what they believed was false. James includes such "vital goods" (as courage, optimism, hope, energy for work, and enjoyment) among the "practical bearings" investing ideas with meaning, except that as exemplified in the case of religious beliefs, beliefs may be meaningful without being verifiable in principle. If this is a correct between-the-lines reading of James, then there are obvious defects in the view. Is the meaning of the religious proposition that "the eternal things are the better" exhausted in such a conjunction as: "If I say my prayers with conviction, I will gain courage; and if I worship in a community of believers, I will find myself more energetically facing the challenge of everyday tasks, etc."? The religious statement is about eternal things. The components of the conjunction are statements about myself on condition that I do this or that. The two do not seem to be about the same thing at all. Besides, the conditionals are in principle verifiable while by hypothesis the religious propositions are not. Surely a statement verifiable in principle cannot be equivalent in meaning to one that is not.

Dewey will have none of this *apologia* for beliefs that are uncontrolled by inquiry. He reviewed James's *Pragmatism* (1907) in the article "What Pragmatism Means by Practical."⁷ Toward the end of the article Dewey criticizes James for leaving "the impression that the fact of the inevitable involution of the personal factor in every belief gives some special sanction to some special beliefs. Mr. James says that his essay on the *right* to believe was unluckily entitled the '*Will to Believe*' (p. 258). Well, even the term 'right' is unfortunate, if the personal or belief factor is inevitable—unfortunate because it seems to indicate a privilege which might be exercised in special cases, in religion, for example, though not in science; or because it suggests to some minds that the fact of the personal complicity involved in belief is a warrant for this or that special personal attitude, instead of being a warning to locate and define it so as to accept responsibility for it. If we mean by 'will' not something deliberate and consciously intentional (much less something insincere), but an active personal participation, then belief *as* will, rather than either the right or the will to believe, seems to phrase the matter correctly." The contrast between James and Dewey is sharp. James thinks that we are morally and intellectually not guilty if under carefully specified conditions we believe (and remember that for pragmatism to believe is the same thing as to be disposed to act) without the benefit of inquiry in Dewey's sense. In contrast, if there is any one persistent theme in Dewey, it is this: that belief uncontrolled by inquiry is a disposition to act blindly, and that as such it is at the root of man's individual and social ills. It is, therefore, morally and intellectually inexcusable.

Dewey's theory of inquiry presupposes, and is supported by, a metaphysics of experience and nature. According to Dewey's theory of inquiry, no judgment is warranted unless it is the product of inquiry. In line with this, metaphysical judgments—judgments about "the generic traits manifested by existence of all kinds without regard to their differentiation into physical and mental"⁸ must be products of inquiry. This rules out both transcendental and Kantian (critical) metaphysics. "To see the organism *in nature*, the nervous system in the

organism, the brain in the nervous system, the cortex in the brain is the answer to the problems which haunt philosophy. And when thus seen they will be seen to be *in*, not as marbles in a box but as events in a history, in a moving, growing, never-finished process" (*Experience and Nature*, p. 259). For classical empiricism experience is the way to know in contrast to classical rationalism's claim that to know is to apprehend realities underlying experienced appearances. Kant tried to adjudicate the dispute by attributing to mind a certain fixed and inherent structure that determines the manner in which the experienced appearances are destined to be organized into a world of things and events. Dewey has a radically new conception of experience. "Experience" is a collective name for all the transactions going on between the organism and its environment. "Experience" appears to be synonymous with "situation." Experience is the occasion for inquiry, supplies the raw material of inquiry and the evidence for judgment. Experience is *in* and *of* nature. The reader must keep in mind this conception of experience if he is to understand Dewey at all.

Experience "contains in a fused union *somewhat* experienced and some processes of *experiencing*."⁹ But there is more to experience than an organism in a process of experiencing something. Experience is also conative and affective. Experience is shot through with felt needs, urges, drives, and with enjoyments and frustrations or sufferings. The conative and affective elements provide the occasion and material for evaluation and moral choice and the aesthetic.

Chapter 10 of *The Quest for Certainty*, entitled "The Construction of Good," is reprinted below. This is one of the numerous places where Dewey is trying to state a naturalistic theory of value.

"*Judgments about values,*" writes Dewey, "*are judgments about the conditions and results of experienced objects; judgments about that which should regulate the formation of our desires, affections and enjoyments.*"

The first half of the quotation makes of evaluations a species of *judgment*; and this at once puts evaluations within the domain of inquiry. Dewey means to provide an alternative, on the one hand, to transcendental absolutism, according to which values exist independently of experience and, on the other hand, to views construing evaluation to be just a matter of psychological response uncontrolled by knowledge of the nature of the things valued. The second half of the quotation says that *value* judgments, as distinct from scientific judgments, are about what things are worth desiring (going after).

Dewey distinguishes objects that *are* valued (liked, enjoyed, prized) from objects that *have* value (are *fit* to be enjoyed, liked, prized). As all naturalists did before him, Dewey holds that nothing can *have* value unless it is *capable of being* valued. But it is commonplace among writers on ethics that not everything capable of being valued has value. With this in mind, Dewey "constructs" good by identifying the goodness of value of things with their capacity to be desired (actively pursued) by those who understand their nature. This means that value judgments depend upon scientific judgments. Scientific judgments describe the way things are—what dispositional and nondispositional properties they have. Dewey construes value in such a way as to make the value of an object a function of a correct apprehension of its nature as revealed in inquiry; hence, no experienced object—and nothing else is in question—can

have value unless it is, in addition to being experienced, rationally understood as well, and no one is ever in a position to judge correctly that a thing has value unless he knows what inquiry has revealed as to the nature of the thing in question.

Moreover, objects that have value naturally must yield consummatory satisfactions to those who come in immediate commerce with them intelligently. This follows from Dewey's conception of what it means for a thing to have value together with the psychological generalization that desires (dispositions to pursue actively) are reinforced when the objects obtained satisfy and inhibited when the objects frustrate. An object can (as a matter of natural fact) have no value, that is, no capacity to sustain intelligent desire, if it hurts, frustrates, arouses aversion when we are in immediate commerce with it. I suggest, but only as a possibly interesting aside, that Dewey's way of tying together value, desire, and enjoyment is reminiscent of Aristotle.

Dewey justifies his theory of value on the grounds that if we all adopted it, we would be in a position to deal with the practical problems of men intelligently. He thinks that the central task of philosophy is to provide an experimental theory (a theory that allows the use of intelligence) concerning the relation between "beliefs about the nature of things due to natural science, and beliefs about values—using the word ["value"] to designate whatever has rightful authority in the direction of conduct" (see p. 195).

Pregnant and liberating though it be, Dewey's theory of value is not a model of precision and clarity. He wants to draw, and correctly, a distinction between scientific and value judgments. At the same time, and again correctly, he wants to preserve an intimate connection between them. But neither the distinction nor the connection is clearly made out. So that Dewey has been accused on the one hand of having reduced value judgments to scientific ones. Stevenson, for instance, charges Dewey with having done this by absorbing the "emotive" aspects of ethical terms "into an elaborate conjunction of predicative ones."¹⁰ On the other hand, Dewey has been accused of having made the converse error; namely, of having reduced the scientific to the evaluative and ethical.¹¹ I happen to believe that Dewey can be read in such a way as to free him of both charges, but this is not the place to argue the case.

Stevenson's criticism is a special case of a charge made against naturalism in G. E. Moore's discussions of "the naturalistic fallacy" in *Principia Ethica*. Chapter 1 of the book is reprinted below, and the introduction to the Moore selections has something to say about "the naturalistic fallacy" (see pp. 224–225). Moore is full of good insights, but like Dewey, it is not easy to be sure what he means.* There are two descriptions in Moore as to what the naturalistic fallacy is. One description says that it is the attempt to define "good" at all. The other says that it is the misidentification of goodness, which is not a "natural" object, with any "natural" object whatever. Neither Moore nor anyone else in the familiar literature has proved that "good" is indefinable. The other formulation of "the naturalistic fallacy" has a point, but the point is lost in the obscurity of the notion of "natural" and "nonnatural" objects and properties. Moore's point is, I think, that "good" cannot be defined in terms of

* I have tried to clear up, to a certain extent, some of the important ideas in Chapter 1 of *Principia Ethica* in "On the Naturalistic Fallacy."¹²

the very properties we would invoke if someone wanted to know the reasons why something is good. This is the merest first approximation of what Moore is trying to say. Its full and adequate elaboration is an important task for moral philosophy. To do what Moore warns us not to do would be a mistake indeed. But I believe that Dewey does not make it.

The student of ethics would do well to study Moore and Dewey with great care and respect. It would not be surprising if the mistakes of the one were best corrected by the true insights of the other. It would not be surprising at all if the resulting synthesis turned out to be the best account yet of the nature of value and obligation.

In the list of Dewey's important contributions to technical philosophy I included his theory of inquiry, his metaphysics, his theory of value and his aesthetics. Of these we have selections from only the first and the third. This is because of strict limitations of space. Accordingly, I have confined the remarks in the present introduction to Dewey's theory of inquiry and theory of value.

G. N.

References

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11. See M. G. White, "Value and Obligation in Lewis and Dewey," *Philosophical Review*, 58 (1949).

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On Logic

by JOHN DEWEY

THE PATTERN OF INQUIRY

The first chapter set forth the fundamental thesis of this volume: Logical forms accrue to subject-matter when the latter is subjected to controlled inquiry. It also set forth some of the implications of this thesis for the nature of logical theory. The second and third chapters stated the independent grounds, biological and cultural, for holding that logic is a theory of experiential naturalistic subject-matter. The first of the next two chapters developed the theme with reference to the relations of the logic of common sense and science, while the second discussed Aristotelian logic as the organized formulation of the language of Greek life, when that language is regarded as the expression of the meanings of Greek culture and of the significance attributed to various forms of natural existence. It was held throughout these chapters that inquiry, in spite of the diverse subjects to which it applies, and the consequent diversity of its special techniques has a common structure or pattern: that this common structure is applied both in common sense and science, although because of the nature of the problems with which they are concerned, the emphasis upon the factors involved varies widely in the two modes. We now come to the consideration of the common pattern.

The fact that new formal properties accrue to subject-matter in virtue of its subjection to certain types of operation is familiar to us in certain fields, even though the idea corresponding to this fact is unfamiliar in logic. Two outstanding instances are provided by art and law. In music, the dance, painting, sculpture, literature and the other fine arts, subject-matters of

Reprinted by permission from *Logic: The Theory of Inquiry*, by John Dewey, Cr., 1938, Holt, Rinehart and Winston. Chapters 6 and 8 are reprinted.

everyday experience are *transformed* by the development of forms which render certain products of doing and making objects of fine art. The materials of legal regulations are transactions occurring in the ordinary activities of human beings and groups of human beings; transactions of a sort that are engaged in apart from law. As certain aspects and phases of these transactions are legally formalized, conceptions such as misdemeanor, crime, torts, contracts and so on arise. These formal conceptions arise out of the ordinary transactions; they are not imposed upon them from on high or from any external and *a priori* source. But when they are formed they are also *formative*; they regulate the proper conduct of the activities out of which they develop.

All of these formal legal conceptions are operational in nature. They formulate and define *ways* of operation on the part of those engaged in the transactions into which a number of persons or groups enter as "parties," and the ways of operation followed by those who have jurisdiction in deciding whether established forms have been complied with, together with the existential consequences of failure of observation. The forms in question are not fixed and eternal. They change, though as a rule too slowly, with changes in the habitual transactions in which individuals and groups engage and the changes that occur in the consequences of these transactions. However hypothetical may be the conception that *logical* forms accrue to existential materials in virtue of the control exercised over inquiries in order that they may fulfil their end, the conception is descriptive of something that verifiably exists. The development of forms in consequence of operations is an established fact in some fields; it is not invented *ad hoc* in relation to logical forms.

The existence of inquiries is not a matter of doubt. They enter into every area of life and into every aspect of every area. In everyday living, men examine; they turn things over intellectually; they infer and judge as "naturally" as they reap and sow, produce and exchange commodities. As a mode of conduct, inquiry is as accessible to objective study as are these other modes of behavior. Because of the intimate and decisive way in which inquiry and its conclusions enter into the management of all affairs of life, no study of the latter is adequate save as it is noted how they are affected by the methods and instruments of inquiry that currently obtain. Quite apart, then, from the particular hypothesis about logical forms that is put forth, study of the objective facts of inquiry is a matter of tremendous import, practically and intellectually. These materials provide the theory of logical forms with a subject-matter that is not only objective but is objective in a fashion that enables logic to avoid the three mistakes most characteristic of its history.

1. In virtue of its concern with objectively observable subject-matter by reference to which reflective conclusions can be tried and tested, dependence upon subjective and "mentalistic" states and processes is eliminated.

2. The distinctive existence and nature of forms is acknowledged. Logic is not compelled, as historic "empirical" logic felt compelled to do, to reduce logical forms to mere transcripts of the empirical materials that antecede the existence of the former. Just as art forms and legal forms are capable of independent discussion and development, so are logical forms, even though the "independence" in question is intermediate, not final and complete. As in the case of these other forms, they originate *out* of experiential material, and when constituted introduce new ways of operating with prior materials, which ways modify the material out of which they develop.

3. Logical theory is liberated from the unobservable, transcendental and "intuitional."

When methods and results of inquiry are studied as objective data, the distinction that has often been drawn between noting and reporting the ways in which men *do* think, and prescribing the ways in which they *ought* to think, takes on a very different interpretation from that usually given. The usual interpretation is in terms of the difference between the psychological and the logical, the latter consisting of "norms" provided from some source wholly outside of and independent of "experience."

The way in which men *do* "think" denotes, as it is *here* interpreted, simply the ways in which men at a given time carry on their inquiries. So far as it is used to register a difference from the ways in which they *ought* to think, it denotes a difference like that between good and bad farming or good and bad medical practice. Men think in ways they should not when they follow methods of inquiry that experience of past inquiries shows are not competent to reach the intended end of the inquiries in question.

Everybody knows that today there are in vogue methods of farming generally followed in the past which compare very unfavorably in their results with those obtained by practices that have already been introduced and tested. When an expert tells a farmer he *should* do thus and so, he is not setting up for a bad farmer an ideal drawn from the blue. He is instructing him in methods that have been tried and that have proved successful in procuring results. In a similar way we are able to contrast various kinds of inquiry that are in use or that have been used in respect to their economy and efficiency in reaching warranted conclusions. We know that some methods of inquiry are better than others in just the same way in which we know that some methods of surgery, farming, road-making, navigating or what-not are better than others. It does not follow in any of these cases that the "better" methods are ideally perfect, or that they are regulative or "normative" because of conformity to some absolute form. They are the methods which experience up to the present time shows to be the best methods available for achieving certain results, while abstraction of these methods does supply a (relative) norm or standard for further undertakings.

The search for the pattern of inquiry is, accordingly, not one instituted in the dark or at large. It is checked and controlled by knowledge of the kinds

of inquiry that have and that have *not* worked; methods which, as was pointed out earlier, can be so compared as to yield reasoned or rational conclusions. For, through comparison-contrast, we ascertain *how and why* certain means and agencies have provided warrantably assertible conclusions, while others have not and *cannot* do so in the sense in which "cannot" expresses an intrinsic incompatibility between means used and consequences attained.

We may now ask: What is the *definition* of Inquiry? That is, what is the most highly generalized conception of inquiry which can be justifiably formulated? The definition that will be expanded, directly in the present chapter and indirectly in the following chapters, is as follows: *Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole.*

The original indeterminate situation is not only "open" to inquiry, but it is open in the sense that its constituents do not hang together. The determinate situation on the other hand, *qua* outcome of inquiry, is a closed and, as it were, finished situation or "universe of experience." "Controlled or directed" in the above formula refers to the fact that inquiry is competent in any given case in the degree in which the operations involved in it actually do terminate in the establishment of an objectively unified existential situation. In the intermediate course of transition and transformation of the indeterminate situation, *discourse* through use of symbols is employed as means. In received logical terminology, propositions, or terms and the relations between them, are intrinsically involved.

¶ 1. *The Antecedent Conditions of Inquiry: The Indeterminate Situation*

Inquiry and questioning, up to a certain point, are synonymous terms. We inquire when we question; and we inquire when we seek for whatever will provide an answer to a question asked. Thus it is of the very nature of the indeterminate situation which evokes inquiry to be *questionable*; or, in terms of actuality instead of potentiality, to be uncertain, unsettled, disturbed. The peculiar quality of what pervades the given materials, constituting them a situation, is not just uncertainty at large; it is a unique doubtfulness which makes that situation to be just and only the situation it is. It is this unique quality that not only evokes the particular inquiry engaged in but that exercises control over its special procedures. Otherwise, one procedure in inquiry would be as likely to occur and to be effective as any other. Unless a situation is uniquely qualified in its very indeterminateness, there is a condition of complete panic; response to it takes the form of blind

and wild overt activities. Stating the matter from the personal side, we have "lost our heads." A variety of names serves to characterize indeterminate situations. They are disturbed, troubled, ambiguous, confused, full of conflicting tendencies, obscure, etc.

It is the *situation* that has these traits. *We* are doubtful because the situation is inherently doubtful. Personal states of doubt that are not evoked by and are not relative to some existential situation are pathological; when they are extreme they constitute the mania of doubting. Consequently, situations that are disturbed and troubled, confused or obscure, cannot be straightened out, cleared up and put in order, by manipulation of our personal states of mind. The attempt to settle them by such manipulations involves what psychiatrists call "withdrawal from reality." Such an attempt is pathological as far as it goes, and when it goes far it is the source of some form of actual insanity. The habit of disposing of the doubtful as if it belonged only to *us* rather than to the existential situation in which we are caught and implicated is an inheritance from subjectivistic psychology. The biological antecedent conditions of an unsettled situation are involved in that state of imbalance in organic-environmental interactions which has already been described. Restoration of integration can be effected, in one case as in the other, only by operations which actually modify existing conditions, not by merely "mental" processes.

It is, accordingly, a mistake to suppose that a situation is doubtful only in a "subjective" sense. The notion that in actual existence everything is completely determinate has been rendered questionable by the progress of physical science itself. Even if it had not been, complete determination would not hold of existences as an *environment*. For Nature is an environment only as it is involved in interaction with an organism, or self, or whatever name be used.¹

Every such interaction is a temporal process, not a momentary cross-sectional occurrence. The situation in which it occurs is indeterminate, therefore, with respect to its *issue*. If we call it *confused*, then it is meant that its outcome cannot be anticipated. It is called *obscure* when its course of movement permits of final consequences that cannot be clearly made out. It is called *conflicting* when it tends to evoke discordant responses. Even were existential conditions unqualifiedly determinate in and of themselves, they are indeterminate in *significance*: that is, in what they import and portend in their interaction with the organism. The organic responses that enter into the production of the state of affairs that is temporally later and sequential are just as existential as are environing conditions.

1. Except of course a purely mentalistic name, like consciousness. The alleged problem of "interactionism" versus automatism, parallelism, etc., is a problem (and an insoluble one) because of the assumption involved in its statement—the assumption, namely, that the interaction in question is with something mental instead of with biological-cultural human beings.

The immediate *locus* of the problem concerns, then, what kind of responses the organism shall make. It concerns the interaction of organic responses and environing conditions in their movement toward an existential issue. It is a commonplace that in any troubled state of affairs *things* will come out differently according to what is done. The farmer won't get grain unless he plants and tills; the general will win or lose the battle according to the way he conducts it, and so on. Neither the grain nor the tilling, neither the outcome of the battle nor the conduct of it, are "mental" events. Organic interaction becomes inquiry when existential consequences are anticipated; when environing conditions are examined with reference to their potentialities; and when responsive activities are selected and ordered with reference to actualization of some of the potentialities, rather than others, in a final existential situation. Resolution of the indeterminate situation is active and operational. If the inquiry is adequately directed, the final issue is the unified situation that has been mentioned.

¶ II. Institution of a Problem

The unsettled or indeterminate situation might have been called a *problematic* situation. This name would have been, however, proleptic and anticipatory. The indeterminate situation becomes problematic in the very process of being subjected to inquiry. The indeterminate situation comes into existence from existential causes, just as does, say, the organic imbalance of hunger. There is nothing intellectual or cognitive in the existence of such situations, although they are the necessary condition of cognitive operations or inquiry. In themselves they are precognitive. The first result of evocation of inquiry is that the situation is taken, adjudged, to be problematic. To see that a situation requires inquiry is the initial step in inquiry.²

Qualification of a situation as problematic does not, however, carry inquiry far. It is but an initial step in institution of a problem. A problem is not a task to be performed which a person puts upon himself or that is placed upon him by others—like a so-called arithmetical "problem" in school work. A problem represents the partial transformation by inquiry of a problematic situation into a determinate situation. It is a familiar and significant saying that a problem well put is half-solved. To find out *what* the problem and problems are which a problematic situation presents to be inquired into, is to be well along in inquiry. To mistake the problem involved is to cause subsequent inquiry to be irrelevant or to go astray. Without a problem, there is blind groping in the dark. The way in which the problem

2. If by "two-valued logic" is meant a logic that rewards "true and false" as the sole logical values, then such a logic is necessarily so truncated that clearness and consistence in logical doctrine are impossible. Being the matter of a problem is a primary logical property.

is conceived decides what specific suggestions are entertained and which are dismissed; what data are selected and which rejected; it is the criterion for relevancy and irrelevancy of hypotheses and conceptual structures. On the other hand, to set up a problem that does not grow out of an actual situation is to start on a course of dead work, nonetheless dead because the work is "busy work." Problems that are self-set are mere excuses for seeming to do something intellectual, something that has the semblance but not the substance of scientific activity.

¶ III. *The Determination of a Problem-Solution*

Statement of a problematic situation in terms of a problem has no meaning save as the problem instituted has, in the very terms of its statement, reference to a possible solution. Just because a problem well stated is on its way to solution, the determining of a genuine problem is a *progressive* inquiry; the cases in which a problem and its probable solution flash upon an inquirer are cases where much prior ingestion and digestion have occurred. If we assume, prematurely, that the problem involved is definite and clear, subsequent inquiry proceeds on the wrong track. Hence the question arises: How is the formation of a genuine problem so controlled that further inquiries will move toward a solution?

The first step in answering this question is to recognize that no situation which is *completely* indeterminate can possibly be converted into a problem, having definite constituents. The first step then is to search out the *constituents* of a given situation which, as constituents, are settled. When an alarm of fire is sounded in a crowded assembly hall, there is much that is indeterminate as regards the activities that may produce a favorable issue. One may get out safely or one may be trampled and burned. The fire is characterized, however, by some settled traits. It is, for example, located *somewhere*. Then the aisles and exits are at fixed places. Since they are settled or determinate in *existence*, the first step in institution of a problem is to settle them in *observation*. There are other factors which, while they are not as temporally and spatially fixed, are yet observable constituents; for example, the behavior and movements of other members of the audience. All of these observed conditions taken together constitute "the facts of the case." They constitute the terms of the problem, because they are conditions that must be reckoned with or taken account of in any relevant solution that is proposed.

A *possible* relevant solution is then suggested by the determination of factual conditions which are secured by observation. The possible solution presents itself, therefore, as an *idea*, just as the terms of the problem (which are facts) are instituted by observation. Ideas are anticipated consequences (forecasts) of what will happen when certain operations are executed under

and with respect to observed conditions.³ Observation of facts and suggested meanings or ideas arise and develop in correspondence with each other. The more the facts of the case come to light in consequence of being subjected to observation, the clearer and more pertinent become the conceptions of the way the problem constituted by these facts is to be dealt with. On the other side, the clearer the idea, the more definite, as a truism, become the operations of observation and of execution that must be performed in order to resolve the situation.

An idea is first of all an anticipation of something that may happen; it marks a *possibility*. When it is said, as it sometimes is, that science is *prediction*, the anticipation that constitutes every idea an idea is grounded in a set of controlled observations and of regulated conceptual ways of interpreting them. Because inquiry is a progressive determination of a problem and its possible solution, ideas differ in grade according to the stage of inquiry reached. At first, save in highly familiar matters, they are vague. They occur at first simply as suggestions; suggestions just spring up, flash upon us, occur to us. They may then become stimuli to direct an overt activity but they have as yet no logical status. Every idea originates as a suggestion, but not every suggestion is an idea. The suggestion becomes an idea when it is examined with reference to its functional fitness; its capacity as a means of resolving the given situation.

This examination takes the form of reasoning, as a result of which we are able to appraise better than we were at the outset, the pertinency and weight of the meaning now entertained with respect to its functional capacity. But the final test of its possession of these properties is determined when it actually functions—that is, when it is put into operation so as to institute by means of observations facts not previously observed, and is then used to organize them with other facts into a coherent whole.

Because suggestions and ideas are of that which is not present in given existence, the meanings which they involve must be embodied in some symbol. Without some kind of symbol no idea; a meaning that is completely disembodied can not be entertained or used. Since an existence (which *is* an existence) is the support and vehicle of a meaning and is a symbol instead of a merely physical existence only in this respect, embodied meanings or ideas are capable of objective survey and development. To “look at an idea” is not a mere literary figure of speech.

“Suggestions” have received scant courtesy in logical theory. It is true

3. The theory of *ideas* that has been held in psychology and epistemology since the time of Locke's successors is completely irrelevant and obstructive in logical theory. For in treating them as copies of perceptions or “impressions,” it ignores the prospective and anticipatory character that defines *being* as idea. Failure to define ideas functionally, in the reference they have to a solution of a problem, is one reason they have been treated as merely “mental.” The notion, on the other hand, that ideas are fantasies is a derivative. Fantasies arise when the function an idea performs is ruled out when it is entertained and developed.

that when they just "pop into our heads," because of the workings of the psycho-physical organism, they are not logical. But they are both the conditions and the primary stuff of logical ideas. The traditional empiristic theory reduced them, as has already been pointed out, to mental copies of physical things and assumed that they were *per se* identical with ideas. Consequently it ignored the function of ideas in directing observation and in ascertaining relevant facts. The rationalistic school, on the other hand, saw clearly that "facts" apart from ideas are trivial, that they acquire import and significance only in relation to ideas. But at the same time it failed to attend to the operative and functional nature of the latter. Hence, it treated ideas as equivalent to the ultimate structure of "Reality." The Kantian formula that apart from each other "perceptions are blind and conceptions empty" marks a profound logical insight. The insight, however, was radically distorted because perceptual and conceptual contents were supposed to originate from different sources and thus required a third activity, that of synthetic understanding, to bring them together. In logical fact, perceptual and conceptual materials are instituted in functional correlativity with each other, in such a manner that the former locates and describes the problem while the latter represents a possible method of solution. Both are determinations in and by inquiry of the original problematic situation whose pervasive quality controls their institution and their contents. Both are finally checked by their capacity to work together to introduce a resolved unified situation. As distinctions they represent logical divisions of labor.

¶ IV. Reasoning

The necessity of developing the meaning-contents of ideas in their relations to one another has been incidentally noted. This process, operating with symbols (constituting propositions) is reasoning in the sense of ratiocination or rational discourse.⁴ When a suggested meaning is immediately accepted, inquiry is cut short. Hence the conclusion reached is not grounded, even if it happens to be correct. The check upon immediate acceptance is the examination of the meaning as a meaning. This examination consists in noting what the meaning in question implies in relation to other meanings in the system of which it is a member, the formulated relation constituting a proposition. If such and such a relation of meanings is accepted, then we are committed to such and such other relations of meanings because of their membership in the same system. Through a series of intermediate meanings, a meaning is finally reached which is more clearly *relevant* to the problem in hand than the originally suggested idea. It indicates operations which

4. "Reasoning" is sometimes used to designate *inference* as well as ratiocination. When so used in logic the tendency is to identify inference and implication and thereby seriously to confuse logical theory.

can be performed to test its applicability, whereas the original idea is usually too vague to determine crucial operations. In other words, the idea or meaning when developed in discourse directs the activities which, when executed, provide needed evidential material.

The point made can be most readily appreciated in connection with scientific reasoning. An hypothesis, once suggested and entertained, is developed in relation to other conceptual structures until it receives a form in which it can instigate and direct an experiment that will disclose precisely those conditions which have the maximum possible force in determining whether the hypothesis should be accepted or rejected. Or it may be that the experiment will indicate what modifications are required in the hypothesis so that it may be applicable, i.e., suited to interpret and organize the facts of the case. In many familiar situations, the meaning that is most relevant has been settled because of the eventuations of experiments in prior cases so that it is applicable almost immediately upon its occurrence. But, indirectly, if not directly, an idea or suggestion that is not developed in terms of the constellation of meanings to which it belongs can lead only to overt response. Since the latter terminates inquiry, there is then no adequate inquiry into the meaning that is used to settle the given situation, and the conclusion is in so far logically ungrounded.

¶ V. *The Operational Character of Facts-Meanings*

It was stated that the observed facts of the case and the ideational contents expressed in ideas are related to each other, as, respectively, a clarification of the problem involved and the proposal of some possible solution; that they are, accordingly, functional divisions in the work of inquiry. Observed facts in their office of locating and describing the problem are existential; ideational subject-matter is non-existential. How, then, do they co-operate with each other in the resolution of an existential situation? The problem is insoluble save as it is recognized that both observed facts and entertained ideas are operational. Ideas are operational in that they instigate and direct further operations of observation; they are proposals and plans for acting upon existing conditions to bring new facts to light and to organize all the selected facts into a coherent whole.

What is meant by calling facts operational? Upon the negative side what is meant is that they are not self-sufficient and complete in themselves. They are selected and described, as we have seen, for a purpose, namely statement of the problem involved in such a way that its material both indicates a meaning relevant to resolution of the difficulty and serves to test its worth and validity. In regulated inquiry facts are selected and arranged with the express intent of fulfilling this office. They are not merely *results* of operations of observation which are executed with the aid of bodily organs and

auxiliary instruments of art, but they are the particular facts and kinds of facts that will link up with one another in the definite ways that are required to produce a definite end. Those not found to connect with others in furtherance of this end are dropped and others are sought for. Being functional, they are necessarily operational. Their function is to serve as evidence and their evidential quality is judged on the basis of their capacity to form an ordered whole in response to operations prescribed by the ideas they occasion and support. If "the facts of the case" were final and complete in themselves, if they did not have a special operative force in resolution of the problematic situation, they could not serve as evidence.

The operative force of facts is apparent when we consider that no fact in isolation has evidential potency. Facts are evidential and are tests of an idea in so far as they are capable of being organized with one another. The organization can be achieved only as they *interact* with one another. When the problematic situation is such as to require extensive inquiries to effect its resolution, a series of interactions intervenes. Some observed facts point to an idea that stands for a possible solution. This idea evokes more observations. Some of the newly observed facts link up with those previously observed and are such as to rule out other observed things with respect to their evidential function. The new order of facts suggests a modified idea (or hypothesis) which occasions new observations whose result again determines a new order of facts, and so on until the existing order is both unified and complete. In the course of this serial process, the ideas that represent possible solutions are tested or "proved."

Meantime, the orders of fact, which present themselves in consequence of the experimental observations the ideas call out and direct, are *trial* facts. They are provisional. They are "facts" if they are observed by sound organs and techniques. But they are not on that account the *facts of the case*. They are tested or "proved" with respect to their evidential function just as much as ideas (hypotheses) are tested with reference to their power to exercise the function of resolution. The operative force of both ideas and facts is thus practically recognized in the degree in which they are connected with *experiment*. Naming them "operational" is but a theoretical recognition of what is involved when inquiry satisfies the conditions imposed by the necessity for experiment.

I recur, in this connection, to what has been said about the necessity for symbols in inquiry. It is obvious, on the face of matters, that a possible mode of solution must be carried in symbolic form since it is a possibility, not an assured present existence. Observed facts, on the other hand, are existentially present. It might seem therefore, that symbols are not required for referring to them. But if they are not carried and treated by means of symbols, they lose their provisional character, and in losing this character they are categorically asserted and inquiry comes to an end. The carrying on of inquiry requires that the facts be taken as *representative* and not just as *pre-sented*.

This demand is met by formulating them in propositions—that is, by means of symbols. Unless they are so represented they relapse into the total qualitative situation.

¶ VI. *Common Sense and Scientific Inquiry*

The discussion up to this point has proceeded in general terms which recognizes no distinction between common sense and scientific inquiry. We have now reached a point where the community of pattern in these two distinctive modes of inquiry should receive explicit attention. It was said in earlier chapters that the difference between them resides in their respective subject-matters, not in their basic logical forms and relations; that the difference in subject-matters is due to the difference in the problems respectively involved; and, finally, that this difference sets up a difference in the ends or objective consequences they are concerned to achieve. Because common sense problems and inquiries have to do with the interactions into which living creatures enter in connection with environing conditions in order to establish objects of use and enjoyment, the symbols employed are those which have been determined in the habitual culture of a group. They form a system but the system is practical rather than intellectual. It is constituted by the traditions, occupations, techniques, interests, and established institutions of the group. The meanings that compose it are carried in the common everyday language of communication between members of the group. The meanings involved in this common language system determine what individuals of the group may and may not do in relation to physical objects and in relations to one another. They regulate *what* can be used and enjoyed and *how* use and enjoyment shall occur.

Because the symbol-meaning systems involved are connected directly with cultural-life-activities and are related to each other in virtue of this connection, the specific meanings which are present have reference to the specific and limited environing conditions under which the group lives. Only those things of the environment that are taken, according to custom and tradition, as having connection with and bearing upon this life, enter into the meaning system. There is no such thing as disinterested intellectual concern with either physical or social matters. For, until the rise of science, there were no problems of common sense that called for such inquiry. Disinterestedness existed practically in the demand that group interests and concerns be put above private needs and interests. But there was no intellectual disinterestedness beyond the activities, interests and concerns of the group. In other words, there was no science as such, although, as was earlier pointed out, there did exist information and techniques which were available for the purposes of scientific inquiry and out of which the latter subsequently grew.

In scientific inquiry, then, meanings are related to one another on the

ground of their character *as* meanings, freed from direct reference to the concerns of a limited group. Their intellectual abstractness is a product of this liberation, just as the "concrete" is practically identified by directness of connection with environmental interactions. Consequently a new language, a new system of symbols related together on a new basis, comes into existence, and in this new language semantic coherence, as such, is the controlling consideration. To repeat what has already been said, connection with problems of use and enjoyment is the source of the dominant role of qualities, sensible and moral, and of ends in common sense.

In science, since meanings are determined on the ground of their relation as meanings to one another, *relations* become the objects of inquiry and qualities are relegated to a secondary status, playing a part only as far as they assist in institution of relations. They are subordinate because they have an instrumental office, instead of being themselves, as in prescientific common sense, the matters of final importance. The enduring hold of common sense is testified to historically by the long time it took before it was seen that scientific objects are strictly relational. First tertiary qualities were eliminated; it was recognized that moral qualities are not agencies in determining the structure of nature. Then secondary qualities, the wet-dry, hot-cold, light-heavy, which were the explanatory principles of physical phenomena in Greek science, were ejected. But so-called primary qualities took their place, as with Newton and the Lockean formulation of Newtonian existential postulates. It was not until the threshold of our time was reached that scientific inquiries perceived that their own problems and methods required an interpretation of "primary qualities" in terms of relations, such as position, motion and temporal span. In the structure of distinctively scientific objects these relations are indifferent to qualities.

The foregoing is intended to indicate that the different objectives of common sense and of scientific inquiry demand different subject-matters and that this difference in subject-matters is not incompatible with the existence of a common pattern in both types. There are, of course, secondary logical forms which reflect the distinction of properties involved in the change from qualitative and teleological subject-matter to non-qualitative and non-teleological relations. But they occur and operate within the described community of pattern. They are explicable, and explicable only, on the ground of the distinctive problems generated by scientific subject-matter. The independence of scientific objects from limited and fairly direct reference to the environment as a factor in activities of use and enjoyment, is equivalent, as has already been intimated, to their *abstract* character. It is also equivalent to their *general* character in the sense in which the generalizations of science are different from the generalizations with which common sense is familiar. The generality of *all* scientific subject-matter as such means that it is freed from restriction to conditions which present themselves at particular times and places. Their reference is to *any* set of time and place conditions—a statement which is not to be confused with the doctrine that they have no

reference to actual existential occasions. Reference to time-place of existence is necessarily involved, but it is reference to whatever set of existences fulfils the general relations laid down in and by the constitution of the scientific object.⁵

¶ *Summary*

Since a number of points have been discussed, it will be well to round up conclusions reached about them in a summary statement of the structure of the common pattern of inquiry. Inquiry is the directed or controlled transformation of an indeterminate situation into a determinately unified one. The transition is achieved by means of operations of two kinds which are in functional correspondence with each other. One kind of operations deals with ideational or conceptual subject-matter. This subject-matter stands for possible ways and ends of resolution. It anticipates a solution, and is marked off from fancy because, or, in so far as, it becomes operative in instigation and direction of new observations yielding new factual material. The other kind of operations is made up of activities involving the techniques and organs of observation. Since these operations are existential they modify the prior existential situation, bring into high relief conditions previously obscure, and relegate to the background other aspects that were at the outset conspicuous. The ground and criterion of the execution of this work of emphasis, selection and arrangement is to delimit the problem in such a way that existential material may be provided with which to test the ideas that represent possible modes of solution. Symbols, defining terms and propositions, are necessarily required in order to retain and carry forward both ideational and existential subject-matters in order that they may serve their proper functions in the control of inquiry. Otherwise the problem is taken to be closed and inquiry ceases.

One fundamentally important phase of the transformation of the situation which constitutes inquiry is central in the treatment of judgment and its functions. The transformation is existential and hence temporal. The pre-cognitive unsettled situation can be settled only by modification of its constituents. Experimental operations change existing conditions. Reasoning, as such, can provide means for effecting the change of conditions but by itself cannot effect it. Only execution of existential operations directed by an idea in which ratiocination terminates can bring about the re-ordering of envionring conditions required to produce a settled and unified situation.

5. The consequences that follow are directly related to the statement in Ch. IV that the elimination of qualities and ends is intermediate; that, in fact, the construction of purely relational objects has enormously liberated and expanded common sense uses and enjoyments by conferring control over production of qualities, by enabling new ends to be realistically instituted, and by providing competent means of achieving them.

Since this principle also applies to the meanings that are elaborated in science, the experimental production and re-arrangement of physical conditions involved in natural science is further evidence of the unity of the pattern of inquiry. The temporal quality of inquiry means, then, something quite other than that the process of inquiry takes time. It means that the objective subject-matter of inquiry undergoes temporal modification.

¶ Terminological

Were it not that knowledge is related to inquiry as a product to the operations by which it is produced, no distinctions requiring special differentiating designations would exist. Material would merely be a matter of knowledge or of ignorance and error; that would be all that could be said. The content of any given proposition would have the values "true" and "false" as final and exclusive attributes. But if knowledge is related to inquiry as its warrantably assertible product, and if inquiry is progressive and temporal, then the material inquired into reveals distinctive properties which need to be designated by distinctive names. As *undergoing* inquiry, the material has a different logical import from that which it has as the *outcome* of inquiry. In its first capacity and status, it will be called by the general name *subject-matter*. When it is necessary to refer to subject-matter in the context of either observation or ideation, the name *content* will be used, and, particularly on account of its *representative* character, content of propositions.

The name *objects* will be reserved for subject-matter so far as it has been produced and ordered in settled form by means of inquiry; proleptically, objects are the *objectives* of inquiry. The apparent ambiguity of using "objects" for this purpose (since the word is regularly applied to things that are observed or thought of) is only apparent. For things exist *as* objects for us only as they have been previously determined as outcomes of inquiries. When used in carrying on new inquiries in new problematic situations, they are known as objects in virtue of prior inquiries which warrant their assertibility. In the new situation, they are *means* of attaining knowledge of something else. In the strict sense, they are part of the *contents* of inquiry as the word content was defined above. But retrospectively (that is, as products of prior determination in inquiry) they are objects.

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IMMEDIATE KNOWLEDGE: UNDERSTANDING AND INFERENCE

The considerations adduced in discussion of the pattern of inquiry and of the structure of judgment, entail the conclusion that all knowledge as

grounded assertion involves mediation. Mediation, in this context, means that an inferential function is involved in all warranted assertion. The position here defended runs counter to the belief that there is such a thing as immediate knowledge, and that such knowledge is an indispensable precondition of all mediated knowledge. Because of the wide currency of this latter doctrine and the intrinsic importance of the logical issue involved, this chapter will be devoted to the discussion of the theme of immediate knowledge.

Logical schools as opposed to each other as are the rationalistic and the empiristic agree in accepting the doctrine of immediate knowledge. On this point they differ only with respect to the objects and organs of such knowledge. Rationalist schools hold that ultimate principles of a universal character are the objects of immediate knowledge and that reason is the organ of their apprehension. Empiristic schools believe that sense-perception is the organ of knowledge and that the things immediately known are sensory qualities or, as they are now more usually called, sense-data. Some logical theories maintain that both kinds of immediate knowledge exist and that mediation and inferential knowledge result from the union of the two; a union in which *a priori* first truths and empirical material are brought into connection with each other.

The doctrine of immediate knowledge would not be so widely held unless there were *prima facie* grounds of great plausibility to suggest it and apparent evidence that can be marshalled in its support. I shall introduce critical discussion of the doctrine by stating how these grounds are to be interpreted from the standpoint of the position already taken in this book.

1. There is continuity in inquiry. The conclusions reached in one inquiry become means, material and procedural, of carrying on further inquiries. In the latter, the results of earlier inquiries are taken and used without being resubjected to examination. In uncritical reflection the net outcome is often an accumulation of error. But there are conceptual objects, and objects of perceptual experience, which have been so instituted and confirmed in the course of different inquiries, that it would be a waste of time and energy in further inquiries to make them objects of investigation before proceeding to take and use them. This immediate use of objects known in consequence of previous mediation is readily confused with immediate knowledge.

2. It was noted in the previous chapter that final judgment is constructed by a series of intermediate partial judgments, to which the name *estimates* or *appraisals* was given. The content of these intermediate judgments, which cover both matters of fact and conceptual structures, is carried in propositions. In any inquiry of extensive scope (because of the nature of the problem with which it is concerned) these propositions gain relative independence. While they are ultimately means for determining final judgment, for the time being they are absorbing ends; just as, we have seen, in physical

production and construction, tools are apparently independent objects complete and self-sufficient in themselves. Their function and the potential consequence of the exercise of their function become completely integrated into their immediate structure. As soon as it is forgotten that they are means and that their value is determined by their efficacy as operative means, they appear to be objects of immediate knowledge instead of being means of attaining knowledge.

When, however, their functional character is recognized, the mistake which is committed in these interpretations is evident:

1. While the direct use of objects, factual and conceptual, which have been determined in the course of resolving prior problematic situations is of indispensable practical value in the conduct of further inquiries, such objects are not exempt in new inquiries from need for re-examination and reconstitution. The fact that they have fulfilled the demands imposed upon them in previous inquiries is not a logical proof that, in the form in which they have emerged, they are organs and instrumentalities which will satisfy the demands of a new problematic situation. On the contrary, one of the commonest sources of error is the premature assumption that a new situation so closely resembles former ones that conclusions reached in these earlier cases can be directly carried over. Even the history of scientific inquiry shows how often this error has been made and for what long periods it has gone undetected. One indispensable condition of controlled inquiry is readiness and alertness to submit even the best grounded conclusions of prior inquiry to re-examination with reference to their applicability in new problems. There is a presumption in their favor but the presumption is no guarantee.

2. A similar order of considerations applies to propositional contents which are taken and used. They may have proved completely valid in dealing with some problems and yet not be the fit means for dealing with problems which *prima facie* present the same features. One may point to the revisions of the propositions of classic mechanics that were required when applied to extremely minute bodies of high velocities. For centuries, the axioms and definitions of Euclidean geometry were regarded as absolute first principles which could be accepted without question. Preoccupation with a new order of problems disclosed that they were both overlapping and deficient as logical grounds for a generalized geometry. The result has made it clear that instead of being "self-evident" truths immediately known, they are postulates adopted because of what follows from them. In fact, the belief that they are true by their intrinsic nature retarded the progress of mathematics because it prevented freedom of postulation. With this change in the conception of the character of mathematical axioms, one of the chief bulwarks of immediate knowledge of universal principles crumbled.

The denial of the existence of immediate knowledge does not then deny the existence of certain facts alleged to support the doctrine. It is the logical interpretation of these facts which is in question. Denial of the particular

interpretation now under critical discussion was positively foreshadowed in the considerations which established the provisional and operational standing of the factual and conceptual contents of judgment. It is notorious that a hypothesis does not have to be true in order to be highly serviceable in the conduct of inquiry. Examination of the historical progress of any science will show that the same thing holds good of "facts": of what has been taken in the past as evidential. They were serviceable, not because they were true or false, but because, when they were taken to be provisional working means of advancing investigation, they led to discovery of other facts which proved more relevant and more weighty. Just as it would be hard to find an instance of a scientific hypothesis that turned out to be valid in precisely the same form in which it was first put forward, so it would be hard in any important scientific undertaking to find an initial proposition about the state of facts that has remained unchanged throughout the course of inquiry in respect to its content and its significance. Nevertheless, propositions about hypotheses and about conjunctions of existences have served an indispensable purpose because of their operational character as means. The history of science also shows that when hypotheses have been taken to be finally *true* and hence unquestionable, they have obstructed inquiry and kept science committed to doctrines that later turned out to be invalid.

These considerations dispose of a dialectical argument which has been used ever since the time of Aristotle, and is still current today. It is argued that inference must rest upon something known from which it starts, so that unless there are true premises which serve as such a basis it is impossible, no matter how adequate inference and discursive reasoning may be, to arrive at true conclusions. Hence the only way of avoiding a *regressus ad infinitum* is said to be the existence of truths immediately known. Even if the argument were dialectically unanswerable, it would still be confronted by the stubborn facts which show that correct conclusions have been progressively reached from incorrect "premises." But the dialectical reply is simple. It suffices to have hypothetical (conditional) material such that it directs inquiry into channels in which new material, factual and conceptual, is disclosed, material which is more relevant, more weighted and confirmed, more fruitful, than were the initial facts and conceptions which served as the point of departure. This statement is but a restatement of the functionally operative status of the contents of judgment up to enactment of final judgment.

A certain ambiguity in words has played a very considerable role in fostering the doctrine of immediate knowledge. Knowledge in its strictest and most honorific sense is identical with warranted assertion. But "knowledge" also means understanding, and an object, or an act (and its object) that may be—and has been—called *apprehension*. I can *understand* what the word and the idea of centaur, sea-serpent, transmutation of chemical elements, mean, without thereby knowing them in the sense of having grounds

for asserting their existence. No intelligent search for a new invention, no controlled inquiry to discover whether a certain conception of, say, the nature of atoms is or is not borne out by the facts, can be conducted without a direct grasp or understanding of the meaning-content of some idea. As the very description of this kind of "knowledge" shows, it is not knowledge in the sense of *justified assertion* that a state of existence *is* thus-and-so. It is easy, however, as the history of philosophy illustrates, to carry over the first meaning into the second. Since the first is direct or immediate when it occurs, it is assumed that the second also has the same properties. Just as, after considerable experience, we understand meanings directly, as when we hear conversation on a familiar subject or read a book, so because of experience we come to recognize objects on sight. I see or note directly that *this* is a typewriter, *that* is a book, the other thing is a radiator, etc. This kind of direct "knowledge" I shall call *apprehension*; it is seizing or grasping, intellectually, with questioning. But it is a product, mediated through certain organic mechanisms of retention and habit, and it presupposes prior experiences and mediated conclusions drawn from them.

But the important point for the purpose of the present topic is that either an immediate overt response occurs, like using the typewriter or picking up the book (in which cases the situation is not a cognitional one), or that the object directly noted is part of an act of inquiry directed toward knowledge as warranted assertion. In the latter case, the fact of immediate apprehension is no logical guarantee that the object or event directly apprehended is that part of the "facts of the case" it is *prima facie* taken to be. There is no warrant for assuming that it is evidential with respect to the final assertion to be reached. It may be irrelevant in whole or part, or it may be trivial in its significance for the problem at hand. Its very familiarity may be obstructive, tending to fix indications that are suggested in old grooves when the need is to search for data which will start suggestions in an unaccustomed direction. In other words, immediate *apprehension* of an object or event is no more identical with knowledge in the logical sense required than is immediate understanding or *comprehension* of a meaning. From these general considerations, I turn to an examination of certain theories of immediate knowledge which have exercised historical influence.

¶ I. The Empiristic Theory of Mill

Mill denies that there are *general* self-evident truths, or general *a priori* truths. Since he does not deny the existence of general truths, he is committed to a statement of a theory concerning their grounds or "proof." His position on this point is unambiguous. They not only arise, genetically, in the course of sense perception, but they are *proved*, if proved at all, by means of such particulars. These particulars, in so far as they are ultimate, are then

immediately known. For them to exist in sense-perception is identical with their being known. When this statement does not itself appear to be self-evidently true, it is said to be such because we are dealing with complexes of particulars, not with ultimate simple particulars. The latter Mill calls indifferently *sensations* or *feelings*, or even states of consciousness which are known when and because they exist. "Truths," he says, "are known in two ways: some are known directly, and of themselves; some through the medium of other truths. . . . The truths known by intuition are the original premises from which all others are inferred. . . . The province of logic must be restricted to that portion of our knowledge which consists of inferences from truths previously known. . . .¹ Examples of truths known to us by immediate consciousness are our bodily sensations and mental feelings. I know directly and of my own knowledge, that I was vexed yesterday, or that I am hungry today."²

The question of whether states of consciousness exist which necessarily "know" themselves in virtue of being states of consciousness, Mill calls "metaphysical." In reality, the belief in their existence was part of a provincial psychological tradition; it no longer generally obtains. His position in respect to "immediate" knowledge of particulars can be discussed, however, without reference to any special assumption concerning the constitution of the particulars. Leaving out all reference to sensations and states of consciousness, it should be obvious that his examples fall far short of exemplifying what he alleges they illustrate.

Take the phrase "I was vexed yesterday." The meaning of "I" is so far from being immediately given that it has long been the theme of controversial discussion; an immediate knowledge of "yesterday" is certainly an extraordinary occurrence; differentiation of "vexation" from other emotional states is a rather slow acquisition in human development. The case is no different in principle from "I am hungry today." It is possible to *feel* hungry when one *is not* hungry; the "feeling" can be produced artificially without the organism being in a state of need for food. The discrimination between the two states may be a difficult problem. If "today" means anything more than the present moment, it involves a fairly elaborate intellectual construction, and any number of passages could be quoted from Mill himself to the effect that a given immediate state can be characterized as *hunger* only by going beyond that state and assimilating it inferentially to other states. That common sense directly grasps certain occurrences as having the *significance of vexation, hunger, yesterday, today*, is undeniable. But the "self-evidence" bred by familiarity, while a fact of practical importance, is very different from cognitive self-evidence, and often leads common sense astray even in practical matters. We are forced to the conclusion, which a more detailed analysis would bear out, that Mill's whole doctrine of immediate-

1. J. S. Mill, *Logic: Introduction*, Section IV.

2. *Ibid.*

knowledge is itself an *inference* from a psychological theory which is itself inferential. In its strictly logical bearing it rests upon the uncritical acceptance of the old notion that no proposition can be "proved" unless it follows from "truths" already known.

II. The Lockian Version

Locke's account of immediate knowledge is important not only because of its historic influence, in that his original objective view of sensations and ideas was the source of their later transformation into states of consciousness, but because of his clear grasp of the epistemic issue involved—an issue that was obscured and dodged in later developments. He holds, on the one hand, that all knowledge of material existence depends upon sensation, and he points out, on the other hand, that sensations (which he takes to be bodily states) come between us and knowledge of objects in nature in such a way as to render impossible scientific knowledge of the latter. In the first place, most sensory qualities do not belong to natural objects, which possess only the primary qualities of figures, size, solidity and motion; in the second place, even the latter as experienced qualities do not enable us to get knowledge of the "real constitution" of objects.

"If," says Locke, "we could discover the figure, size, texture, and motion of the minute constituent parts of any two bodies we should know without trial (experience) several of their operations upon one another as now we do know the properties of a square or triangle." But "if" here represents a condition contrary to fact. For we are destitute of senses acute enough to discover the minute particles of bodies and to give us ideas of their mechanical constitution. Nor is this the whole story. Even if we had senses acute enough to meet this condition (and it might now be argued that recent physics with the aid of artificial devices has supplied the lack), the dependence of knowledge of the real constitution of objects upon sense would still stand immovably in the way. "Knowledge about natural objects extends as far as the *present* testimony of the senses employed about particular objects that do *then* affect them and no further. Hence, we shall never be able to discover general, instructive, unquestionable truths about natural objects."³ The italicized words, *present* and *then* indicate the impassable barrier existing between sense, which is particular and transient, and objects which are permanent and have identical ultimate "constitutions" or structures.

This thoroughgoing negative conclusion of Locke, which necessarily follows from regarding sense-data as themselves objects of knowledge, might have acted as a warning to later theorists against assigning inherent cognitive import to sense-data; as a warning to examine any premise that leads to

3. John Locke, *Essay on the Human Understanding*, Book IV, Ch. 3, "On the Extent of Knowledge."

the conclusion that knowledge of physical objects is impossible. If sense-data, or any other data, are final and independent (isolated) objects of knowledge, *then* no predicates having objective existential reference can be warrantably attached to them.

At times, when Locke rebels at his own conclusion, and is desirous of justifying the ways of Gods and Nature to man, he lays down a principle which, if he had followed it out consistently, might have set subsequent theory upon a different track. Upon occasion he says that qualities are marks of differences in things "whereby we are able to discern one thing from another, and so choose them for our necessities and apply them to our uses"—as, say, the quality of white, which enables us to tell milk from water.⁴

Had this mode of interpretation of sensory qualities been made fundamental, it would have appeared that they are not objects of cognition in themselves but that they acquire cognitive function when they are employed in specific situations as signs of something beyond themselves. Qualities are the sole means we have for discriminating objects and events. Their use in this capacity is constant. For *practical* purposes no harm results in identifying the function with the quality as an existence, just as no harm results from identifying an object as a *spade* because the *operative* use and the consequences of the use of the object are integrated with its existence. But failure for the purposes of *theory* to distinguish existence and function has been the source of continued doctrinal confusion.

III. Atomic Realism

Mill's interpretation suffered as we saw from two serious blemishes. It regarded qualities as states of consciousness and it treated such complex objects as *today*, *yesterday* and *vexation* as simple primitive data. Recent theory has avoided both of these errors. Qualities are given objective status as sense-data, and the supposedly immediately given existential contents of propositions are treated as complexes to be reduced to data that are irreducibly simple. Apprehension of immediate simple qualities constitutes propositions which are "atomic," while propositions containing an inferential coefficient are "molecular." Such propositions as "This is red, hard, sweet," etc., are atomic. According to the theory, *this* in such propositions is devoid of any *descriptive* qualification. For were *this* anything more than a bare demonstrative, it would be complex and hence, on the theory, not immediately given. In "This *ribbon* is red," what is designated by *ribbon* is not given in the sense in which "this" and "red" are given. Some writers also include in the domain of atomic propositions, such propositions as "This is before that" as a simple and ultimate immediately given *relation*.

The notion that there is such a thing as a *merely* demonstrative "this"

4. *Ibid.*, Book IV, Ch. 4, "On the Reality of Knowledge."

lacking all descriptive content has already been criticized. According to the atomic logical theory, each *this*, as a subject of a proposition, must be exactly identical logically (though not in quality) with every other. Each is determined by the mere act of pointing *at* and each such act contains, by statement, nothing that marks it off from any other demonstrative act. It follows that there is no ground or reason for *predicating* one quality of it rather than any other. The case is not bettered if it is said that "this red" is what is irreducibly given. For even here we have no proposition, only a bare "subject" which is the subject of no predicate. As in the first case, there is no ground whatever for any determinate predication.

It would not be denied, I suppose, that in fact it requires a series of experimental operations, involving definite techniques, to warrant the assertion that a given present quality is *red*. A scientific determination differs from a loose common sense assertion of the existence of a specific quality just in the fact that such techniques are employed. A strictly grounded scientific determination of red would, for example, involve the techniques by means of which the presence of a definite number of vibrations per unit of time was ascertained. In other words, it is not held, I take it, that the atomic quality is primitive in a psychological sense. It is logically primitive in that any existential proposition finally rests upon determination of some simple quality. Now, while in most cases inquiry does not actually go as far as this, it is admitted that *in theory* experimental observation must proceed to determine an irreducible quality in order that an existential proposition be fully warranted. But the more clearly this fact is recognized the more clearly does it stand out that such a determination is not complete and final in itself but is a *means* to the resolution of some problem. It is a factor in the institution of what may warrantably be taken and used as evidence. For example, consider the case in which the utmost pains are taken in a case of spectrum analysis to reach a grounded proposition that such-and-such a color quality is present.

The fallacy in the theory of logically original complete and self-sufficient atomic propositions is thus an instance of the same fallacy that has been repeatedly noted: The conversion of a function in inquiry into an independent structure. It is an admitted fact that ideally, or in theory, propositions about irreducible qualities are necessary in order adequately to ground judgment having existential reference. What is denied is that such propositions have complete and self-sufficient logical character in isolation. For they are determinations of evidential material in order to locate the problem in hand and secure evidence to test a solution. The doctrine under criticism rules out the context in which such propositions occur and the logical end for which and logical ground upon which they are instituted. This may be verified by any one who calls to mind a case in which, either in common sense or science, such propositions are present and have weight. As to their ground, I call attention again to the fact that there is no *this*

which is merely and exclusively *red* or any other single quality and that, therefore, there must be some ground for selection of one quality as predicate rather than another.

Although further discussion of the logical principles involved will require some retraversing of matters already gone over, the basic importance of the issue justifies repetition, especially as the territory will be surveyed from a somewhat different point of view. It has been usual for some time in philosophy (1) to view the common sense world in its distinction from the domain of scientific objects as strictly perceptual in character; (2) to regard perception as a mode of cognition; and (3) what is perceived whether object or quality, to be therefore cognitive in status and force. None of these assumptions is warranted. (a) The common sense world includes, to be sure, perceived objects, but these are understood only in the context of an *environment*. An environment is constituted by the interactions between things and a living creature. It is primarily the scene of actions performed and of consequences undergone in processes of interaction; only secondarily do parts and aspects of it become objects of knowledge. Its constituents are first of all objects of use and enjoyment-suffering, not of knowledge. (b) In relation to perception, an environment forms an extensive temporal-spatial field. Only occasionally are reflexes directed in the life behavior of an organism toward isolated excitations. The maintenance of life is a continuous affair. It involves organs and habits acquired in the past. Actions performed have to be adapted to future conditions or death will speedily ensue. The material towards which behavior is *directly* impelled is but the focal aspect of an environing field. The kind of behavior which occurs must, in order to be adaptive and responsive, vary with the kind of field of which the immediate object is focal.

It follows, then, that when objects or qualities are cognitively apprehended, they are viewed in reference to the exigencies of the perceived field in which they occur. They then become objects of *observation*, observation being defined precisely as the restrictive-selective determination of a particular object or quality within a total environing field. Usually the total environing field is "understood," or taken for granted, because it is there as the standing condition of any *differential* activity to be performed. The psychological theory of perception has been framed in terms of what happens in these specific differential acts of observation-perception of *an* object or *a* quality, or an orange, a patch of yellow. For the purpose of a report of just what occurs in an observation and for the psychological problem involved, it is not necessary to criticise this procedure. But when the results are carried over into logical theory and taken to provide the basis for a theory of data in their logical status and bearing, complete distortion results. For isolated objects or qualities are then taken in their isolation to be the *givens* or *data*.

For logical purposes, it makes no difference whether the data, when reduced to their simplest contents, are taken to be Lockean simple ideas, sensations, Humeian impressions, the sense-data of contemporary theory, or

"essences." For the same isolation, self-sufficiency, and completeness is ascribed to them in each case. What has actually occurred, then, in the formation of the contemporary theory of atomic propositions is that the conclusions of psychological theory, reached in dealing with a special psychological situation, have been bodily transferred into logic and made the basis of the entire doctrine of atomic propositions having existential reference. This uncritical adoption of psychological conclusions as the foundation of an important branch of the logical theory of propositions has occurred in spite of the fact that the logicians who proceed in this way are particularly urgent about the necessity of freeing logic completely from psychological matters.

I turn now to certain popular and empirical considerations which are taken to substantiate the notion of immediate knowledge.

1. The distinction between acquaintance-knowledge and knowledge-about and the validity of the distinction is generally acknowledged. I am acquainted with my neighbor; I know something about Julius Caesar. Acquaintance-knowledge has a directness and intimacy lacking in knowledge-about. The latter can only be expressed in propositions *that* certain things are so-and-so. The former is expressed in actual commerce with the individual; it is marked by affection and dislikes. It takes effect in expectations as to the conduct of the person or object with which one is acquainted so that appropriate ways of overt conduct are ready in advance in the person having the acquaintance. I am acquainted, say, with the French language when I am prepared to speak and read it; I may know *about* its grammar and something of its vocabulary and yet have no ability to speak. The distinction between the two modes of knowledge was embodied in linguistic expressions long before theoretical attention was called to it: *Cognoscere* and *scire*; *connaître* and *savoir*; *Kennen* and *wissen*; in earlier English idiom, to *ken* (with its association of can, ability to act) and to *wit*.

The existence and the importance of the difference is acknowledged. But it is far from supporting the logical theory of immediate knowledge. The immediacy involved is that of intimate connection with emotion and ability to act. In the first place, acquaintance-knowledge is not primitive, but acquired, and in so far depends upon prior experiences into which mediation has entered. In the second place (and of more importance for the present point), acquaintance-knowledge is frequently *not* knowledge in the sense of being warrantably assertible. It enables us to form practical expectations which are perhaps often fulfilled. But the familiarity that attends acquaintanceship often blinds us to things of primary importance in reaching conclusions. Acquaintance with certain habits of speech is no guarantee against blunders and solecisms; it may be their source. From a logical point of view acquaintance-knowledge is subject to critical inquiry and revision. As a rule, it invites it.

2. The existence of recognitions, which are practically instantaneous, is another empirical ground for the theory under examination. The same

considerations apply here as in the case of acquaintance-knowledge. In fact, recognition may be regarded as a special limiting instance of the latter. We recognize persons with whom we have only slight acquaintance; we may recognize words in a foreign language without being so acquainted with the language that we can speak or read it. Recognition of an object is also (a) a product of experiences which have involved doubt and search, and (b) while of immense practical importance, is not exempt from the necessity of inquiries to determine the correctness of a given recognition of its pertinency to the problem in hand. Recognition is not re-cognition in the sense of a re-knowing. It is rather an *acknowledgement* of a certain object or event as having a specified place in a situation.

The doctrine that "simple apprehension" is complete in itself is often accompanied by a certain fallacy. It is supposed that because the *act* of apprehension is simple and single, therefore, the *object* apprehended must also be. But complex scenes are also apprehended simply—as when one returns to the scene of his childhood. Moreover, relatively simple objects are important not in virtue of their inherently simple structure but because of some crucially evidential role their simplicity permits them to play—as for example, in the relation of finger-prints to personal identifications. Similarly, we recognize a familiar person by his voice alone without having to observe him in his physical entirety. It saves time and energy to be able to make the relatively simple a means of identification.

Such facts suggest the peculiar function of simples or elements in inquiry. The more complex the structure of an object, the greater the number of possible inferences that can be drawn from its presence; its different constituents point in different directions. The less complex a given object or event the more restricted it is in its constitution and hence the more *definite* is its indicative signifying capacity. There is abundant evidence in the history of science to show that reduction of objects to elements is one of the most effective means of both safeguarding and extending inferential inquiry. There is no evidence that such simple elements exist by themselves in nature. It is foolish to object to analysis and its outcome in institution of elements. But the very foolishness of this objection goes to show that the concept of "simple" and "element" is functional and that giving simples and elements independent existential standing, whether in physics, psychology, anatomy or politics, is but one more case of hypostization of an instrument.

¶ IV. *Understanding and Comprehension*

So far the detailed discussion has been occupied with existential subject-matters, for grasp of which the word *apprehension* is generically employed. It is advisable to say something about direct grasp of meanings and conceptual structures for whose designation the words *understanding* or *compre-*

hension issued. We take, see, and “twig,” the force of an argument; we have insight into general principles. The seeing and insight are often direct and practically instantaneous. A meaning, previously obscure, may come to us “in a flash.” The same type of considerations adduced with respect to direct apprehension of objects and qualities applies in the case of the present topic, and discussion may be abbreviated. Attention has already been called to the fact that one meaning of *to know* is to understand, and that this meaning is not to be confused with warranted affirmation of validity. A person must understand the meaning of *authorship* in order to consider intelligently the application of that term to a given person, say, of the *Waverley Novels*. The understanding is a necessary condition of any particular ascription having validity. But evidently it is not a sufficient condition.

The series of propositions which constitute a chain of ordered discourse should be such that the meaning of their constituent terms are as unambiguous and determinate as possible. But fulfilment of this condition does not guarantee the validity of their application in a given problem. Hence *understanding*, like apprehension, is never final. No proposition about a relation of meanings, however determinate and adequate the proposition is, can stand alone logically. Nor is its incapacity to stand alone removed by union with other propositions of the same sort; although the union may result in getting meanings into such a shape that they are fitted for application.

The two doctrines, that there is an immediate knowledge of existential objects or of qualities as sense-data, and that there is an immediate knowledge of rational principles—necessarily go together. Atomistic empiricism and rational *a priorism* are correlative doctrines. Kant’s categories of the *a priori* understanding are the logical counterpart of the doctrine of independent sense-material which he took over from Hume, just as T. H. Green’s “necessary relations of thought” are required to balance the view of sensations he took over from the psychology of the school of the Mills. When the existential material of experience is reduced to immediately given atomic cases of “this” connection between the atoms (such as is involved in every molecular proposition), is impossible unless non-empirical or *a priori* propositions are recognized. Postulation of self-evident existential “facts” requires postulation of self-evident rational “truths.”

A strictly logical formulation of this state of affairs is given by Bertrand Russell. After stating that “in every proposition and in every inference there is, besides the particular subject-matters concerned, a certain *form*, a way in which the constituents of the proposition are put together,” he gives the following example of what is meant by form: “If anything has a certain property, and whatever has this property has a certain other property, then the thing in question has the other property.” He then goes on to draw the theoretical conclusion considered in the next paragraph.⁵

5. Bertrand Russell, *Scientific Method in Philosophy*.

The proposition cited as an example of form is said to be "absolutely general; it applies to all things and all properties, and it is quite self-evident." Moreover, it is *a priori*: "Since it does not mention any particular thing, or even any particular quality or relation, it is wholly independent of the accidental facts of the existent world, and can be known, theoretically, without any experience of particular things, or their qualities and relations." This conclusion follows from its being laid down as a logical truth that "General truths cannot be inferred from particular truths alone, but must, if they are to be known, be either self-evident, or inferred from premises of which one at least is a general truth. But all *empirical* evidence is of particular truths. Hence if there is any knowledge of general truths at all there must be some knowledge of general truths which is independent of empirical evidence, i.e., does not depend upon sense-data."

In the latter passage there is not only an implicit but an explicit identification of ultimate ("primitive") existential propositions with atomic propositions. *If* empirical (here employed in the sense of existential) propositions are atomic, *then* it certainly follows that any propositions about the logical forms by which they are related to one another must be supra- and extra-empirical, or *a priori*. They must be known by some kind of rational intuition, a conception involved, although in a somewhat disguised way, in calling them "self-evident." The apodosis clause of the above *if-then* proposition follows with such neat necessity from the protasis clause that it invites attention to the latter. If the antecedent clause is invalid, the validity of the consequent clause is indeterminate, while if the consequent clause is false or doubtful, then so is that of the antecedent clause. In other words, the passage quoted sets forth a *problem*. The very necessity of the relation of the two clauses merely accentuates the importance of the problem. I shall not repeat here the reasons previously given for rejecting the clause which postulates atomic existential propositions as primitive in independence of their function in inquiry. Nor shall I rehearse the reasons for doubting the existence of a faculty of pure reason independent of any and all experience, a faculty gifted with the power of infallible intuition.

The points directly relevant to the problem are, first that what is "self-evident" in the general logical proposition cited, is its *meaning*. To say that it is self-evident means that one who reflects upon it *in the meaning system of which it is a member* will apprehend its meaning in that relation—exactly as one might apprehend the meaning, say, of the empirical proposition "that ribbon is blue." The question of the logical force and function of the proposition, of the interpretation to be given it, remains open—just as does the *truth* of the empirical proposition after its *meaning* is grasped.

Secondly, the theoretical interpretation of the *significance* of the meaning directly apprehended is far from self-evident. There is, for example, the alternative represented by the theoretical position which was stated by Peirce, to the effect that all propositions about logical forms and relations are

leading principles, not premises. They are, from this point of view, formulations of *operations*, which (a) are hypotheses about operations to be performed in all inquiries which lead to warranted conclusions; and (b) are hypotheses that have been confirmed without exception in all cases which have led to stable assertions; while (c) failure to observe the conditions set forth have been found, as a matter of experience of inquiries and their results, to lead to unstable conclusions.

Such propositions about logical forms as are exemplified in the dictum about possession of properties that are "independent" of the specific subject-matter of existential propositions are *not* (it is admitted) conclusions drawn merely from subject-matters as purely particular, and they are not proved by these particular propositions. But there is nothing in this admission inconsistent with their being drawn from *operations of inquiry* as existential and empirical occurrences. In the degree in which we understand what is done in inquiries that result in warranted assertions, we understand the operational conditions which have to be observed. These conditions, when formulated, are the content of general propositions about logical forms. The conditions of the required operations (required in order that a certain kind of consequence may issue) are as much matters of experience as are factual contents: which are themselves also discriminated in order to serve as conditions of a warranted outcome.

It is not claimed that this proposition about logical propositions is "self-evident" as to its truth. It *is* claimed that it has an intelligible meaning, capable of being directly grasped as a meaning, and that this meaning, when it is used or applied to the problems of logical theory serves to clarify and resolve them. The conception, on the other hand, that "experience" is reducible to immediately given atomic propositions, that are possessed of self-evident truth, introduces complications and confusions. Universal propositions about logical forms are propositional functions and as such are in themselves neither true nor false. They state modes of *procedure* in inquiry which are postulated as applicable and as required in any controlled inquiry. Like mathematical axioms, their meaning, or force, is determined and tested by what follows from their operative use.

As far as the doctrine of immediate knowledge is directly concerned, the discussion has reached an end. But there are certain things which may be added from the side of the mediated character of all knowledge in order to guard against misapprehension. (a) It is not held that inferred interpretations are tested, confirmed, verified (or the opposite) by particular objects in their particularity. On the contrary it is the capacity of the inferred idea to order and organize particulars into a coherent whole that is the criterion. (b) It is not held that *inference* by itself exhausts logical functions and determines exclusively all logical forms. On the contrary, proof, in the sense of *test*, is an equally important function.

Moreover, inference, even in its connection with test, is not logically final

and complete. The heart of the entire theory developed in this work is that the resolution of an indeterminate situation is the end, in the sense in which "end" means *end-in-view* and in the sense in which it means *close*. Upon this view, inference is subordinate although indispensable. It is not, as it is for example in the logic of John Stuart Mill, exhaustive and all-inclusive. It is a necessary but not a sufficient condition of warranted assertions.

The Construction of Good

by JOHN DEWEY

We saw at the outset of our discussion that insecurity generates the quest for certainty. Consequences issue from every experience, and they are the source of our interest in what is present. Absence of arts of regulation diverted the search for security into irrelevant modes of practice, into rite and cult; thought was devoted to discovery of omens rather than of signs of what is to occur. Gradually there was differentiation of two realms, one higher, consisting of the powers which determine human destiny in all important affairs. With this religion was concerned. The other consisted of the prosaic matters in which man relied upon his own skill and his matter-of-fact insight. Philosophy inherited the idea of this division. Meanwhile in Greece many of the arts had attained a state of development which raised them above a merely routine state; there were intimations of measure, order and regularity in materials dealt with which give intimations of underlying rationality. Because of the growth of mathematics, there arose also the ideal of a purely rational knowledge, intrinsically solid and worthy and the means by which the intimations of rationality within changing phenomena could be comprehended within science. For the intellectual class the stay and consolation, the warrant of certainty, provided by religion was henceforth found in intellectual demonstration of the reality of the objects of an ideal realm.

With the expansion of Christianity, ethico-religious traits came to dominate the purely rational ones. The ultimate authoritative standards for

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regulation of the dispositions and purposes of the human will were fused with those which satisfied the demands for necessary and universal truth. The authority of ultimate Being was, moreover, represented on earth by the Church; that which in its nature transcended intellect was made known by a revelation of which the Church was the interpreter and guardian. The system endured for centuries. While it endured, it provided an integration of belief and conduct for the western world. Unity of thought and practice extended down to every detail of the management of life; efficacy of its operation did not depend upon thought. It was guaranteed by the most powerful and authoritative of all social institutions.

Its seemingly solid foundation was, however, undermined by the conclusions of modern science. They effected, both in themselves and even more in the new interests and activities they generated, a breach between what man is concerned with here and now and the faith concerning ultimate reality which, in determining his ultimate destiny, had previously given regulation to his present life. The problem of restoring integration and co-operation between man's beliefs about the world in which he lives and his beliefs about the values and purposes that should direct his conduct is the deepest problem of modern life. It is the problem of any philosophy that is not isolated from that life.

The attention which has been given to the fact that in its experimental procedure science has surrendered the separation between knowing and doing has its source in the fact that there is now provided within a limited, specialized and technical field the possibility and earnest, as far as theory is concerned, of effecting the needed integration in the wider field of collective human experience. Philosophy is called upon to be the theory of the practice, through ideas sufficiently definite to be operative in experimental endeavor, by which the integration may be made secure in actual experience. Its central problem is the relation that exists between the beliefs about the nature of things due to natural science to beliefs about values—using that word to designate whatever is taken to have rightful authority in the direction of conduct. A philosophy which should take up this problem is struck first of all by the fact that beliefs about values are pretty much in the position in which beliefs about nature were before the scientific revolution. There is either a basic distrust of the capacity of experience to develop its own regulative standards, and an appeal to what philosophers call eternal values, in order to insure regulation of belief and action; or there is acceptance of enjoyments actually experienced irrespective of the method or operation by which they are brought into existence. Complete bifurcation between rationalistic method and an empirical method has its final and most deeply human significance in the ways in which good and bad are thought of and acted for and upon.

As far as technical philosophy reflects this situation, there is division of theories of values into two kinds. On the one hand, goods and evils, in

every region of life, as they are concretely experienced, are regarded as characteristic of an inferior order of Being—intrinsically inferior. Just because they are things of human experience, their worth must be estimated by reference to standards and ideals derived from ultimate reality. Their defects and perversion are attributed to the same fact; they are to be corrected and controlled through adoption of methods of conduct derived from loyalty to the requirements of Supreme Being. This philosophic formulation gets actuality and force from the fact that it is a rendering of the beliefs of men in general as far as they have come under the influence of institutional religion. Just as rational conceptions were once superimposed upon observed and temporal phenomena, so eternal values are superimposed upon experienced goods. In one case as in the other, the alternative is supposed to be confusion and lawlessness. Philosophers suppose these eternal values are known by reason; the mass of persons that they are divinely revealed.

Nevertheless, with the expansion of secular interests, temporal values have enormously multiplied; they absorb more and more attention and energy. The sense of transcendent values has become enfeebled; instead of permeating all things in life, it is more and more restricted to special times and acts. The authority of the church to declare and impose divine will and purpose has narrowed. Whatever men say and profess, their tendency in the presence of actual evils is to resort to natural and empirical means to remedy them. But in formal belief, the old doctrine of the inherently disturbed and unworthy character of the goods and standards of ordinary experience persists. This divergence between what men do and what they nominally profess is closely connected with the confusions and conflicts of modern thought.

It is not meant to assert that no attempts have been made to replace the older theory regarding the authority of immutable and transcendent values by conceptions more congruous with the practices of daily life. The contrary is the case. The utilitarian theory, to take one instance, has had great power. The idealist school is the only one in contemporary philosophies, with the exception of one form of neorealism, that makes much of the notion of a reality which is all one with ultimate moral and religious values. But this school is also the one most concerned with the conservation of "spiritual" life. Equally significant is the fact that empirical theories retain the notion that thought and judgment are concerned with values that are experienced independently of them. For these theories, emotional satisfactions occupy the same place that sensations hold in traditional empiricism. Values are constituted by liking and enjoyment; to be enjoyed and to be a value are two names for one and the same fact. Since science has extruded values from its objects, these empirical theories do everything possible to emphasize their purely subjective character of value. A psychological theory of desire and liking is supposed to cover the whole ground of the theory of values; in it, immediate feeling is the counterpart of immediate sensation.

I shall not object to this empirical theory as far as it connects the theory of values with concrete experiences of desire and satisfaction. The idea that there is such a connection is the only way known to me by which the pallid remoteness of the rationalistic theory and the only too glaring presence of the institutional theory of transcendental values can be escaped. The objection is that the theory in question holds down value to objects antecedently enjoyed, apart from reference to the method by which they come into existence; it takes enjoyments which are causal because unregulated by intelligent operations to be values in and of themselves. Operational thinking needs to be applied to the judgment of values just as it has now finally been applied in conceptions of physical objects. Experimental empiricism in the field of ideas of good and bad is demanded to meet the conditions of the present situation.

The scientific revolution came about when material of direct and uncontrolled experience was taken as problematic; as supplying material to be transformed by reflective operations into known objects. The contrast between experienced and known objects was found to be a temporal one; namely, one between empirical subject-matters which were had or "given" prior to the acts of experimental variation and redistribution and those which succeeded these acts and issued from them. The notion of an act whether of sense or thought which supplied a valid measure of thought in immediate knowledge was discredited. Consequences of operations became the important things. The suggestion almost imperatively follows that escape from the defects of transcendental absolutism is not to be had by setting up as values enjoyments that happen anyhow, but in defining value by enjoyments which are the consequences of intelligent action. Without the intervention of thought, enjoyments are not values but problematic goods, becoming values when they re-issue in a changed form from intelligent behavior. The fundamental trouble with the current empirical theory of values is that it merely formulates and justifies the socially prevailing habit of regarding enjoyments as they are actually experienced as values in and of themselves. It completely side-steps the question of regulation of these enjoyments. This issue involves nothing less than the problem of the directed reconstruction of economic, political and religious institutions.

There was seemingly a paradox involved in the notion that if we turned our backs upon the immediately perceived qualities of things, we should be enabled to form valid conceptions of objects, and that these conceptions could be used to bring about a more secure and more significant experience of them. But the method terminated in disclosing the connections or interactions upon which perceived objects, viewed as events, depend. Formal analogy suggests that we regard our direct and original experience of things liked and enjoyed as only possibilities of values to be achieved; that enjoyment becomes a value when we discover the relations upon which its presence depends. Such causal and operational definition gives only a con-

ception of a value, not a value itself. But the utilization of the conception in action results in an object having secure and significant value.

The formal statement may be given concrete content by pointing to the difference between the enjoyed and the enjoyable, the desired and the desirable, the satisfying and the satisfactory. To say that something is enjoyed is to make a statement about a fact, something already in existence; it is not to judge the value of that fact. There is no difference between such a proposition and one which says that something is sweet or sour, red or black. It is just correct or incorrect and that is the end of the matter. But to call an object a value is to assert that it satisfies or fulfills certain conditions. Function and status in meeting conditions is a different matter from bare existence. The fact that something is desired only raises the question of its desirability; it does not settle it. Only a child in the degree of his immaturity thinks to settle the question of desirability by reiterated proclamation: "I want it, I want it, I want it." What is objected to in the current empirical theory of values is not connection of them with desire and enjoyment but failure to distinguish between enjoyments of radically different sorts. There are many common expressions in which the difference of the two kinds is clearly recognized. Take for example the difference between the ideas of "satisfying" and "satisfactory." To say that something satisfies is to report something as an isolated finality. To assert that it is satisfactory is to define it in its connections and interactions. The fact that it pleases or is immediately congenial poses a problem to judgment. How shall the satisfaction be rated? Is it a value or is it not? Is it something to be prized and cherished, *to be* enjoyed? Not stern moralists alone but everyday experience informs us that finding satisfaction in a thing may be a warning, a summons to be on the lookout for consequences. To declare something satisfactory is to assert that it meets specifiable conditions. It is, in effect, a judgment that the thing "will do." It involves a prediction; it contemplates a future in which the thing will continue to serve; it *will* do. It asserts a consequence the thing will actively institute; it will *do*. That it is satisfying is the content of a proposition of fact; that it is satisfactory is a judgment, an estimate, an appraisal. It denotes an attitude to be taken, that of striving to perpetuate and to make secure.

It is worth notice that besides the instances given, there are many other recognitions in ordinary speech of the distinction. The endings "able," "worthy" and "full" are cases in point. Noted and notable, noteworthy; remarked and remarkable; advised and advisable; wondered at and wonderful; pleasing and beautiful; loved and lovable; blamed and blameable, blameworthy; objected to and objectionable; esteemed and estimable; admired and admirable; shamed and shameful; honored and honorable; approved and approvable, worthy of approbation, etc. The multiplication of words adds nothing to the force of the distinction. But it aids in conveying a sense of the fundamental character of the distinction; of the difference

between mere report of an already existent fact and judgment as to the importance and need of bringing a fact into existence; or, if it is already there, of sustaining it in existence. The latter is a genuine practical judgment, and marks the only type of judgment that has to do with the direction of action. Whether or no we reserve the term "value" for the latter (as seems to me proper), is a minor matter; that the distinction be acknowledged as the key to understanding the relation of values to the direction of conduct is the important thing.

This element of direction by an idea of value applies to science as well as anywhere else. For in every scientific undertaking, there is passed a constant succession of estimates; such as "it is worth treating these facts as data or evidence; it is advisable to try this experiment; to make that observation; to entertain such and such a hypothesis; to perform this calculation," etc.

The word "taste" has perhaps got too completely associated with arbitrary liking to express the nature of judgments of value. But if the word be used in the sense of an appreciation at once cultivated and active, one may say that the formation of taste is the chief matter wherever values enter in, whether intellectual, esthetic or moral. Relatively immediate judgments, which we call tact or to which we give the name of intuition, do not precede reflective inquiry, but are the funded products of much thoughtful experience. Expertness of taste is at once the result and the reward of constant exercise of thinking. Instead of there being no disputing about tastes, they are the one thing worth disputing about, if by "dispute" is signified discussion involving reflective inquiry. Taste, if we use the word in its best sense, is the outcome of experience brought cumulatively to bear on the intelligent appreciation of the real worth of likings and enjoyments. There is nothing in which a person so completely reveals himself as in the things which he judges enjoyable and desirable. Such judgments are the sole alternative to the domination of belief by impulse, chance, blind habit and self-interest. The formation of a cultivated and effectively operative good judgment or taste with respect to what is esthetically admirable, intellectually acceptable and morally approvable is the supreme task set to human beings by the incidents of experience.

Propositions about what is or has been liked are of instrumental value in reaching judgments of value, in as far as the conditions and consequences of the thing liked are thought about. In themselves they make no claims; they put forth no demand upon subsequent attitudes and acts; they profess no authority to direct. If one likes a thing he likes it; that *is* a point about which there can be no dispute—although it is not so easy to state just *what* is liked as is frequently assumed. A judgment about what is to *be* desired and enjoyed is, on the other hand, a claim on future action; it possesses *de jure* and not merely *de facto* quality. It is a matter of frequent experience that likings and enjoyments are of all kinds, and that many are such as reflective judgments condemn. By way of self-justification and "rationaliza-

tion," an enjoyment creates a tendency to assert that the thing enjoyed is a value. This assertion of validity adds authority to the fact. It is a decision that the object has a right to exist and hence a claim upon action to further its existence.

The analogy between the status of the theory of values and the theory of ideas about natural objects before the rise of experimental inquiry may be carried further. The sensationalistic theory of the origin and test of thought evoked, by way of reaction, the transcendental theory of *a priori* ideas. For it failed utterly to account for objective connection, order and regularity in objects observed. Similarly, any doctrine that identifies the mere fact of being liked with the value of the object liked so fails to give direction to conduct when direction is needed that it automatically calls forth the assertion that there are values eternally in Being that are the standards of all judgments and the obligatory ends of all action. Without the introduction of operational thinking, we oscillate between a theory that, in order to save the objectivity of judgments of values, isolates them from experience and nature, and a theory that, in order to save their concrete and human significance, reduces them to mere statements about our own feelings.

Not even the most devoted adherents of the notion that enjoyment and value are equivalent facts would venture to assert that because we have once liked a thing we should go on liking it; they are compelled to introduce the idea that *some* tastes are to be cultivated. Logically, there is no ground for introducing the idea of cultivation; liking is liking, and one is as good as another. If enjoyments *are* values, the judgment of value cannot regulate the form which liking takes; it cannot regulate its own conditions. Desire and purpose, and hence action, are left without guidance, although the question of regulation of their formation is the supreme problem of practical life. Values (to sum up) may be connected inherently with liking, and yet not with *every* liking but only with those that judgment has approved, after examination of the relation upon which the object liked depends. A casual liking is one that happens without knowledge of how it occurs nor to what effect. The difference between it and one which is sought because of a judgment that it is worth having and is to be striven for, makes just the difference between enjoyments which are accidental and enjoyments that have value and hence a claim upon our attitude and conduct.

In any case, the alternative rationalistic theory does not afford the guidance for the sake of which eternal and immutable norms are appealed to. The scientist finds no help in determining the probable truth of some proposed theory by comparing it with a standard of absolute truth and immutable being. He has to rely upon definite operations undertaken under definite conditions—upon method. We can hardly imagine an architect getting aid in the construction of a building from an ideal at large, though we can understand his framing an ideal on the basis of knowledge of actual conditions and needs. Nor does the ideal of perfect beauty in antecedent

Being give direction to a painter in producing a particular work of art. In morals, absolute perfection does not seem to be more than a generalized hypostatization of the recognition that there is a good to be sought, an obligation to be met—both being concrete matters. Nor is the defect in this respect merely negative. An examination of history would reveal, I am confident, that these general and remote schemes of value actually obtain a content definite enough and near enough to concrete situations as to afford guidance in action only by consecrating some institution or dogma already having social currency. Concreteness is gained, but it is by protecting from inquiry some accepted standard which perhaps is outworn and in need of criticism.

When theories of values do not afford intellectual assistance in framing ideas and beliefs about values that are adequate to direct action, the gap must be filled by other means. If intelligent method is lacking, prejudice, the pressure of immediate circumstance, self-interest and class-interest, traditional customs, institutions of accidental historic origin, are *not* lacking, and they tend to take the place of intelligence. Thus we are led to our main proposition: *Judgments about values are judgments about the conditions and the results of experienced objects; judgments about that which should regulate the formation of our desires, affections and enjoyments.* For whatever decides their formation will determine the main course of our conduct, personal and social.

If it sounds strange to hear that we should frame our judgments as to what has value by considering the connections in existence of what we like and enjoy, the reply is not far to seek. As long as we do not engage in this inquiry enjoyments (values if we choose to apply that term) are casual; they are given by "nature," not constructed by art. Like natural objects in their qualitative existence, they at most only supply material for elaboration in rational discourse. A *feeling* of good or excellence is as far removed from goodness in fact as a feeling that objects are intellectually thus and so is removed from their being actually so. To recognize that the truth of natural objects can be reached only by the greatest care in selecting and arranging directed operations, and then to suppose that values can be truly determined by the mere fact of liking seems to leave us in an incredible position. All the serious perplexities of life come back to the genuine difficulty of forming a judgment as to the values of the situation; they come back to a conflict of goods. Only dogmatism can suppose that serious moral conflict is between something clearly bad and something known to be good, and that uncertainty lies wholly in the will of the one choosing. Most conflicts of importance are conflicts between things which are or have been satisfying, not between good and evil. And to suppose that we can make a hierarchical table of values at large once for all, a kind of catalogue in which they are arranged in an order of ascending or descending worth, is to indulge in a gloss on our inability to frame intelligent judgments in the concrete. Or else it is to dignify customary choice and prejudice by a title of honor.

The alternative to definition, classification and systematization of satisfactions just as they happen to occur is judgment of them by means of the relations under which they occur. If we know the conditions under which the act of liking, of desire and enjoyment, takes place, we are in a position to know what are the consequences of that act. The difference between the desired and the desirable, admired and the admirable, becomes effective at just this point. Consider the difference between the proposition "That thing has been eaten," and the judgment "That thing is edible." The former statement involves no knowledge of any relation except the one stated; while we are able to judge of the edibility of anything only when we have a knowledge of its interactions with other things sufficient to enable us to foresee its probable effects when it is taken into the organism and produces effects there.

To assume that anything can be known in isolation from its connections with other things is to identify knowing with merely having some object before perception or in feeling, and is thus to lose the key to the traits that distinguish an object as known. It is futile, even silly, to suppose that some quality that is directly present constitutes the whole of the thing presenting the quality. It does not do so when the quality is that of being hot or fluid or heavy, and it does not when the quality is that of giving pleasure, or being enjoyed. Such qualities are, once more, effects, ends in the sense of closing termini of processes involving causal connections. They are something to be investigated, challenges to inquiry and judgment. The more connections and interactions we ascertain, the more we *know* the object in question. Thinking is search for these connections. Heat experienced as a consequence of directed operations has a meaning quite different from the heat that is casually experienced without knowledge of how it came about. The same is true of enjoyments. Enjoyments that issue from conduct directed by insight into relations have a meaning and a validity due to the way in which they are experienced. Some enjoyments are not repented of; they generate no after-taste of bitterness. Even in the midst of direct enjoyment, there is a sense of validity, of authorization, which intensifies the enjoyment. There is solicitude for perpetuation of the *object* having value which is radically different from mere anxiety to perpetuate the *feeling* of enjoyment.

Such statements as we have been making are, therefore, far from implying that there are values apart from things actually enjoyed as good. To find a thing enjoyable is, so to say, a *plus* enjoyment. We saw that it was foolish to treat the scientific object as a rival to or substitute for the perceived object, since the former is intermediate between uncertain and settled situations and those experienced under conditions of greater control. In the same way, judgment of the value of an object to be experienced is instrumental to appreciation of it when it is realized. But the notion that every object that happens to satisfy has an equal claim with every other to be a value is like

supposing that every object of perception has the same cognitive force as every other. There is no knowledge without perception; but objects perceived are *known* only when they are determined as consequences of connective operations. There is no value except where there is satisfaction, but there have to be certain conditions fulfilled to transform a satisfaction into a value.

The time will come when it will be found passing strange that we of this age should take such pains to control by every means at command the formation of ideas of physical things, even those most remote from human concern, and yet are content with haphazard beliefs about the qualities of objects that regulate our deepest interests; that we are scrupulous as to methods of forming ideas of natural objects, and either dogmatic or else driven by immediate conditions in framing those about values. There is, by implication, if not explicitly, a prevalent notion that values are already well known and that all which is lacking is the will to cultivate them in the order of their worth. In fact the most profound lack is not the will to act upon goods already known but the will to know what they are.

It is not a dream that it is possible to exercise some degree of regulation of the occurrence of enjoyments which are of value. Realization of the possibility is exemplified, for example, in the technologies and arts of industrial life—that is, up to a definite limit. Men desired heat, light, and speed of transit and of communication beyond what nature provides of itself. These things have been attained not by lauding the enjoyment of these things and preaching their desirability, but by study of the conditions of their manifestation. Knowledge of relations having been obtained, ability to produce followed, and enjoyment ensued as a matter of course. It is, however, an old story that enjoyment of these things as goods is no warrant of their bringing only good in their train. As Plato was given to pointing out, the physician may know how to heal and the orator to persuade, but the ulterior knowledge of whether it is better for a man to be healed or to be persuaded to the orator's opinion remains unsettled. Here there appears the split between what are traditionally and conventionally called the values of the baser arts and the higher values of the truly personal and humane arts.

With respect to the former, there is no assumption that they can be had and enjoyed without definite operative knowledge. With respect to them it is also clear that the degree in which we value them is measurable by the pains taken to control the conditions of their occurrence. With respect to the latter, it is assumed that no one who is honest can be in doubt what they are; that by revelation, or conscience, or the instruction of others, or immediate feeling, they are clear beyond question. And instead of action in their behalf being taken to be a measure of the extent in which things are values to us, it is assumed that the difficulty is to persuade men to act upon what they already know to be good. Knowledge of conditions and consequences is regarded as wholly indifferent to judging what is of serious

value, though it is useful in a prudential way in trying to actualize it. In consequence, the existence of values that are by common consent of a secondary and technical sort are under a fair degree of control, while those denominated supreme and imperative are subject to all the winds of impulse, custom and arbitrary authority.

This distinction between higher and lower types of value is itself something to be looked into. Why should there be a sharp division made between some goods as physical and material and others as ideal and "spiritual"? The question touches the whole dualism of the material and the ideal at its root. To denominate anything "matter" or "material" is not in truth to disparage it. It is, if the designation is correctly applied, a way of indicating that the thing in question is a condition or means of the existence of something else. And disparagement of effective means is practically synonymous with disregard of the things that are termed, in eulogistic fashion, ideal and spiritual. For the latter terms if they have any concrete application at all signify something which is a desirable consummation of conditions, a cherished fulfillment of means. The sharp separation between material and ideal good thus deprives the latter of the underpinning of effective support while it opens the way for treating things which should be employed as means as ends in themselves. For since men cannot after all live without some measure of possession of such matters as health and wealth, the latter things will be viewed as values and ends in isolation unless they are treated as integral constituents of the goods that are deemed supreme and final.

The relations that determine the occurrence of what human beings experience, especially when social connections are taken into account, are indefinitely wider and more complex than those that determine the events termed physical; the latter are the outcome of definite selective operations. This is the reason why we know something about remote objects like the stars better than we know significantly characteristic things about our own bodies and minds. We forget the infinite number of things we do not know about the stars, or rather that what we call a star is itself the product of the elimination, enforced and deliberate, of most of the traits that belong to an actual existence. The amount of knowledge we possess about stars would not seem very great or very important if it were carried over to human beings and exhausted our knowledge of them. It is inevitable that genuine knowledge of man and society should lag far behind physical knowledge.

But this difference is not a ground for making a sharp division between the two, nor does it account for the fact that we make so little use of the experimental method of forming our ideas and beliefs about the concerns of man in his characteristic social relations. For this separation religions and philosophies must admit some responsibility. They have erected a distinction between a narrower scope of relations and a wider and fuller one into a difference of kind, naming one kind material, and the other mental

and moral. They have charged themselves gratuitously with the office of diffusing belief in the necessity of the division, and with instilling contempt for the material as something inferior in kind in its intrinsic nature and worth. Formal philosophies undergo evaporation of their technical solid contents; in a thinner and more viable form they find their way into the minds of those who know nothing of their original forms. When these diffuse and, so to say, airy emanations re-crystallize in the popular mind they form a hard deposit of opinion that alters slowly and with great difficulty.

What difference would it actually make in the arts of conduct, personal and social, if the experimental theory were adopted not as a mere theory, but as a part of the working equipment of habitual attitudes on the part of everyone? It would be impossible, even were time given, to answer the question in adequate detail, just as men could not foretell in advance the consequences for knowledge of adopting the experimental method. It is the nature of the method that it has to be tried. But there are generic lines of difference which, within the limits of time at disposal, may be sketched.

Change from forming ideas and judgments of value on the basis of conformity to antecedent objects, to constructing enjoyable objects directed by knowledge of consequences, is a change from looking to the past to looking to the future. I do not for a moment suppose that the experiences of the past, personal and social, are of no importance. For without them we should not be able to frame any ideas whatever of the conditions under which objects are enjoyed nor any estimate of the consequences of esteeming and liking them. But past experiences are significant in giving us intellectual instrumentalities of judging just these points. They are tools, not finalities. Reflection upon what we have liked and have enjoyed is a necessity. But it tells us nothing about the *value* of these things until enjoyments are themselves reflectively controlled, or, until, as they now recalled, we form the best judgment possible about what led us to like this sort of thing and what has issued from the fact that we liked it.

We are not, then, to get away from enjoyments experienced in the past and from recall of them, but from the notion that they are the arbiters of things to be further enjoyed. At present, the arbiter is found in the past, although there are many ways of interpreting what in the past is authoritative. Nominally, the most influential conception doubtless is that of a revelation once had or a perfect life once lived. Reliance upon precedent, upon institutions created in the past, especially in law, upon rules of morals that have come to us through unexamined customs, upon uncriticized tradition, are other forms of dependence. It is not for a moment suggested that we can get away from customs and established institutions. A mere break would doubtless result simply in chaos. But there is no danger of such a break. Mankind is too inertly conservative both by constitution and by education to give the idea of this danger actuality. What there is genuine danger

of is that the force of new conditions will produce disruption externally and mechanically: this is an ever present danger. The prospect is increased, not mitigated, by that conservatism which insists upon the adequacy of old standards to meet new conditions. What is needed is intelligent examination of the consequences that are actually effected by inherited institutions and customs, in order that there may be intelligent consideration of the ways in which they are to be intentionally modified in behalf of generation of different consequences.

This is the significant meaning of transfer of experimental method from the technical field of physical experience to the wider field of human life. We trust the method in forming our beliefs about things not directly connected with human life. In effect, we distrust it in moral, political and economic affairs. In the fine arts, there are many signs of a change. In the past, such a change has often been an omen and precursor of changes in other human attitudes. But, generally speaking, the idea of actively adopting experimental method in social affairs, in the matters deemed of most enduring and ultimate worth, strikes most persons as a surrender of all standards and regulative authority. But in principle, experimental method does not signify random and aimless action; it implies direction by ideas and knowledge. The question at issue is a practical one. Are there in existence the ideas and the knowledge that permit experimental method to be effectively used in social interests and affairs?

Where will regulation come from if we surrender familiar and traditionally prized values as our directive standards? Very largely from the findings of the natural sciences. For one of the effects of the separation drawn between knowledge and action is to deprive scientific knowledge of its proper service as a guide of conduct—except once more in those technological fields which have been degraded to an inferior rank. Of course, the complexity of the conditions upon which objects of human and liberal value depend is a great obstacle, and it would be too optimistic to say that we have as yet enough knowledge of the scientific type to enable us to regulate our judgments of value very extensively. But we have more knowledge than we try to put to use, and until we try more systematically we shall not know what are the important gaps in our sciences judged from the point of view of their moral and humane use.

For moralists usually draw a sharp line between the field of the natural sciences and the conduct that is regarded as moral. But a moral that frames its judgments of values on the basis of consequences must depend in a most intimate manner upon the conclusions of science. For the knowledge of the relations between changes which enable us to connect things as antecedents and consequences *is* science. The narrow scope which moralists often give to morals, their isolation of some conduct as virtuous and vicious from other large ranges of conduct, those having to do with health and vigor, business, education, with all the affairs in which desires and affection are implicated,

is perpetuated by this habit of exclusion of the subject-matter of natural science from a role in formation of moral standards and ideals. The same attitude operates in the other direction to keep natural science a technical specialty and it works unconsciously to encourage its use exclusively in regions where it can be turned to personal and class advantage, as in war and trade.

Another great difference to be made by carrying the experimental habit into all matter of practice is that it cuts the roots of what is often called subjectivism, but which is better termed egoism. The subjective attitude is much more widespread than would be inferred from the philosophies which have that label attached. It is as rampant in realistic philosophies as in any others, sometimes even more so, although disguised from those who hold these philosophies under the cover of reverence of and enjoyment of ultimate values. For the implication of placing the standard of thought and knowledge in antecedent existence is that our thought makes no difference in what is significantly real. It then affects only our own attitude toward it.

This constant throwing of emphasis back upon a change made in ourselves instead of one made in the world in which we live seems to me the essence of what is objectionable in "subjectivism." Its taint hangs about even Platonic realism with its insistent evangelical dwelling upon the change made within the mind by contemplation of the realm of essence, and its depreciation of action as transient and all but sordid—a concession to the necessities of organic existence. All the theories which put conversion "of the eye of the soul" in the place of a conversion of natural and social objects that modifies goods actually experienced, is a retreat and escape from existence—and this retraction into self is, once more, the heart of subjective egoisms. The typical example is perhaps the other-worldliness found in religions whose chief concern is with the salvation of the personal soul. But other-worldliness is found as well in estheticism and in all seclusion within ivory towers.

It is not in the least implied that change in personal attitudes, in the disposition of the "subject," is not of great importance. Such change, on the contrary, is involved in any attempt to modify the conditions of the environment. But there is a radical difference between a change in the self that is cultivated and valued as an end, and one that is a means to alteration, through action, of objective conditions. The Aristotelian-medieval conviction that highest bliss is found in contemplative possession of ultimate Being presents an ideal attractive to some types of mind; it sets forth a refined sort of enjoyment. It is a doctrine congenial to minds that despair of the effort involved in creation of a better world of daily experience. It is, apart from theological attachments, a doctrine sure to recur when social conditions are so troubled as to make actual endeavor seem hopeless. But the subjectivism so externally marked in modern thought as compared with ancient is either

a development of the old doctrine under new conditions or is of merely technical import. The medieval version of the doctrine at least had the active support of a great social institution by means of which man could be brought into the state of mind that prepared him for ultimate enjoyment of eternal Being. It had a certain solidity and depth which is lacking in modern theories that would attain the result by merely emotional or speculative procedures, or by any means not demanding a change in objective existence so as to render objects of value more empirically secure.

The nature in detail of the revolution that would be wrought by carrying into the region of values the principle now embodied in scientific practice cannot be told; to attempt it would violate the fundamental idea that we know only after we have acted and in consequences of the outcome of action. But it would surely effect a transfer of attention and energy from the subjective to the objective. Men would think of themselves as agents not as ends; ends would be found in experienced enjoyments of the fruits of a transforming activity. In as far as the subjectivity of modern thought represents a discovery of the part played by personal responses, organic and acquired, in the causal production of the qualities and values of objects, it marks the possibility of a decisive gain. It puts us in possession of some of the conditions that control the occurrence of experienced objects, and thereby it supplies us with an instrument of regulation. There is something querulous in the sweeping denial that things as experienced, as perceived and enjoyed, in any way depend upon interaction with human selves. The error of doctrines that have exploited the part played by personal and subjective reactions in determining what is perceived and enjoyed lies either in exaggerating this factor of constitution into the sole condition—as happens in subjective idealism—or else in treating it as a finality instead of, as with all knowledge, an instrument in direction of further action.

A third significant change that would issue from carrying over experimental method from physics to man concerns the import of standards, principles, rules. With the transfer, these, and all tenets and creeds about good and goods, would be recognized to be hypotheses. Instead of being rigidly fixed, they would be treated as intellectual instruments to be tested and confirmed—and altered—through consequences effected by acting upon them. They would lose all pretence of finality—the ulterior source of dogmatism. It is both astonishing and depressing that so much of the energy of mankind has gone into fighting for (with weapons of the flesh as well as of the spirit) the truth of creeds, religious, moral and political, as distinct from what has gone into effort to try creeds by putting them to the test of acting upon them. The change would do away with the intolerance and fanaticism that attend the notion that beliefs and judgments are capable of inherent truth and authority; inherent in the sense of being independent of what they lead to when used as directive principles. The transformation does not imply merely that men are responsible for acting upon what they profess to be-

lieve; that is an old doctrine. It goes much further. Any belief as such is tentative, hypothetical; it is not just to be acted upon, but is to be *framed* with reference to its office as a guide to action. Consequently, it should be the last thing in the world to be picked up casually, then clung to rigidly. When it is apprehended as a tool and only a tool, an instrumentality of direction, the same scrupulous attention will go to its formation as now goes into the making of instruments of precision in technical fields. Men, instead of being proud of accepting and asserting beliefs and "principles" on the ground of loyalty, will be as ashamed of that procedure as they would now be to confess their assent to a scientific theory out of reverence for Newton or Helmholtz or whomever, without regard to evidence.

If one stops to consider the matter, is there not something strange in the fact that men should consider loyalty to "laws," principles, standards, ideals to be an inherent virtue, accounted unto them for righteousness? It is as if they were making up for some secret sense of weakness by rigidity and intensity of insistent attachment. A moral law, like a law in physics, is not something to swear by and stick to at all hazards; it is a formula of the way to respond when specified conditions present themselves. Its soundness and pertinence are tested by what happens when it is acted upon. Its claim or authority rests finally upon the imperativeness of the situation that has to be dealt with, not upon its own intrinsic nature—as any tool achieves dignity in the measure of needs served by it. The idea that adherence to standards external to experienced objects is the only alternative to confusion and lawlessness was once held in science. But knowledge became steadily progressive when it was abandoned, and clues and tests found within concrete acts and objects were employed. The test of consequences is more exacting than that afforded by fixed general rules. In addition, it secures constant development, for when new acts are tried new results are experienced, while the lauded immutability of eternal ideals and norms is in itself a denial of the possibility of development and improvement.

The various modifications that would result from adoption in social and humane subjects of the experimental way of thinking are perhaps summed up in saying that it would place *method and means* upon the level of importance that has, in the past, been imputed exclusively to ends. Means have been regarded as menial, and the useful as the servile. Means have been treated as poor relations to be endured, but not inherently welcome. The very meaning of the word "ideals" is significant of the divorce which has obtained between means and ends. "Ideals" are thought to be remote and inaccessible of attainment; they are too high and fine to be sullied by realization. They serve vaguely to arouse "aspiration," but they do not evoke and direct strivings for embodiment in actual existence. They hover in an indefinite way over the actual scene; they are expiring ghosts of a once significant kingdom of divine reality whose rule penetrated to every detail of life.

It is impossible to form a just estimate of the paralysis of effort that has been produced by indifference to means. Logically, it is truistic that lack of consideration for means signifies that so-called ends are not taken seriously. It is as if one professed devotion to painting pictures conjoined with contempt for canvas, brush and paints; or love of music on condition that no instruments, whether the voice or something external, be used to make sounds. The good workman in the arts is known by his respect for his tools and by his interest in perfecting his technique. The glorification in the arts of ends at the expense of means would be taken to be a sign of complete insincerity or even insanity. Ends separated from means are either sentimental indulgences or if they happen to exist are merely accidental. The ineffectiveness in action of "ideals" is due precisely to the supposition that means and ends are not on exactly the same level with respect to the attention and care they demand.

It is, however, much easier to point out the formal contradiction implied in ideals that are professed without equal regard for the instruments and techniques of their realization, than it is to appreciate the concrete ways in which belief in their separation has found its way into life and borne corrupt and poisonous fruits. The separation marks the form in which the traditional divorce of theory and practice has expressed itself in actual life. It accounts for the relative impotency of arts concerned with enduring human welfare. Sentimental attachment and subjective eulogy take the place of action. For there is no art without tools and instrumental agencies. But it also explains the fact that in actual behavior, energies devoted to matters nominally thought to be inferior, material, and sordid, engross attention and interest. After a polite and pious deference has been paid to "ideals," men feel free to devote themselves to matters which are more immediate and pressing.

It is usual to condemn the amount of attention paid by people in general to material ease, comfort, wealth, and success gained by competition, on the ground that they give to mere means the attention that ought to be given to ends, or that they have taken for ends things which in reality are only means. Criticisms of the place which economic interest and action occupy in present life are full of complaints that men allow lower aims to usurp the place that belongs to higher and ideal values. The final source of the trouble is, however, that moral and spiritual "leaders" have propagated the notion that ideal ends may be cultivated in isolation from "material" means, as if means and material were not synonymous. While they condemn men for giving to means the thought and energy that ought to go to ends, the condemnation should go to them. For they have not taught their followers to think of material and economic activities as *really* means. They have been unwilling to frame their conception of the values that should be regulative of human conduct on the basis of the actual conditions and operations by which alone values can be actualized.

Practical needs are imminent; with the mass of mankind they are imperative. Moreover, speaking generally, men are formed to act rather than to theorize. Since the ideal ends are so remotely and accidentally connected with immediate and urgent conditions that need attention, after lip service is given to them, men naturally devote themselves to the latter. If a bird in the hand is worth two in a neighboring bush, an actuality in hand is worth, for the direction of conduct, many ideals that are so remote as to be invisible and inaccessible. Men hoist the banner of ideal, and then march in the direction that concrete conditions suggest and reward.

Deliberate insincerity and hypocrisy are rare. But the notion that action and sentiment are inherently unified in the constitution of human nature has nothing to justify it. Integration is something to be achieved. Division of attitudes and responses, compartmentalizing of interests, is easily acquired. It goes deep just because the acquisition is unconscious, a matter of habitual adaptation to conditions. Theory separated from concrete doing and making is empty and futile; practice then becomes an immediate seizure of opportunities and enjoyments which conditions afford without the direction which theory—knowledge and ideas—has power to supply. The problem of the relation of theory and practice is not a problem of theory alone; it is that, but it is also the most practical problem of life. For it is the question of how intelligence may inform action, and how action may bear the fruit of increased insight into meaning: a clear view of the values that are worthwhile and of the means by which they are to be made secure in experienced objects. Construction of ideals in general and their sentimental glorification are easy; the responsibilities both of studious thought and of action are shirked. Persons having the advantage of positions of leisure and who find pleasure in abstract theorizing—a most delightful indulgence to those to whom it appeals—have a large measure of liability for a cultivated diffusion of ideals and aims that are separated from the conditions which are the means of actualization. Then other persons who find themselves in positions of social power and authority readily claim to be the bearers and defenders of ideal ends in church and state. They then use the prestige and authority their representative capacity as guardians of the highest ends confers on them to cover actions taken in behalf of the harshest and narrowest of material ends.

The present state of industrial life seems to give a fair index of the existing separation of means and ends. Isolation of economics from ideal ends, whether of morals or of organized social life, was proclaimed by Aristotle. Certain things, he said, are conditions of a worthy life, personal and social, but are not constituents of it. The economic life of man, concerned with satisfaction of wants, is of this nature. Men have wants and they must be satisfied. But they are only prerequisites of a good life, not intrinsic elements in it. Most philosophers have not been so frank nor perhaps so logical. But upon the whole, economics has been treated as on a lower level than either

morals or politics. Yet the life which men, women and children actually lead, the opportunities open to them, the values they are capable of enjoying, their education, their share in all the things of art and science, are mainly determined by economic conditions. Hence we can hardly expect a moral system which ignores economic conditions to be other than remote and empty.

Industrial life is correspondingly brutalized by failure to equate it as the means by which social and cultural values are realized. That the economic life, thus exiled from the pale of higher values, takes revenge by declaring that it is the only social reality, and by means of the doctrine of materialistic determination of institutions and conduct in all fields, denies to deliberate morals and politics any share of causal regulation, is not surprising.

When economists were told that their subject-matter was merely material, they naturally thought they could be "scientific" only by excluding all reference to distinctively human values. Material wants, efforts to satisfy them, even the scientifically regulated technologies highly developed in industrial activity, are then taken to form a complete and closed field. If any reference to social ends and values is introduced it is by way of an external addition, mainly hortatory. That economic life largely determines the conditions under which mankind has access to concrete values may be recognized or it may not be. In either case, the notion that it is the means to be utilized in order to secure significant values as the common and shared possession of mankind is alien and inoperative. To many persons, the idea that the ends professed by morals are impotent save as they are connected with the working machinery of economic life seems like deflowering the purity of moral values and obligations.

The social and moral effects of the separation of theory and practice have been merely hinted at. They are so manifold and so pervasive that an adequate consideration of them would involve nothing less than a survey of the whole field of morals, economics and politics. It cannot be justly stated that these effects are in fact direct consequences of the quest for certainty by thought and knowledge isolated from action. For, as we have seen, this quest was itself a reflex product of actual conditions. But it may be truly asserted that this quest, undertaken in religion and philosophy, has had results which have reinforced the conditions which originally brought it about. Moreover, search for safety and consolation amid the perils of life by means other than intelligent action, by feeling and thought alone, began when actual means of control were lacking, when arts were undeveloped. It had then a relative historic justification that is now lacking. The primary problem for thinking which lays claim to be philosophic in its breadth and depth is to assist in bringing about a reconstruction of all beliefs rooted in a basic separation of knowledge and action; to develop a system of operative ideas congruous with present knowledge and with present facilities of control over natural events and energies.

We have noted more than once how modern philosophy has been absorbed in the problem of affecting an adjustment between the conclusions of natural science and the beliefs and values that have authority in the direction of life. The genuine and poignant issue does not reside where philosophers for the most part have placed it. It does not consist in accommodation to each other of two realms, one physical and the other ideal and spiritual, nor in the reconciliation of the "categories" of theoretical and practical reason. It is found in that isolation of executive means and ideal interests which has grown up under the influence of the separation of theory and practice. For this, by nature, involves the separation of the material and the spiritual. Its solution, therefore, can be found only in action wherein the phenomena of material and economic life are equated with the purposes that command the loyalties of affection and purpose, and in which ends and ideals are framed in terms of the possibilities of actually experienced situations. But while the solution cannot be found in "thought" alone, it can be furthered by thinking which is operative—which frames and defines ideas in terms of what may be done, and which uses the conclusions of science as instrumentalities. William James was well within the bounds of moderation when he said that looking forward instead of backward, looking to what the world and life might become instead of what they have been, is an alteration in the "seat of authority."

It was incidentally remarked earlier in our discussion that the serious defect in the current empirical philosophy of values, the one which identifies them with things actually enjoyed irrespective of the conditions upon which they depend, is that it formulates and in so far consecrates the conditions of our present social experience. Throughout these chapters, primary attention has perforce been given to the methods and statements of philosophic theories. But these statements are technical and specialized in formulation only. In origin, content and import they are reflections of some condition or some phase of concrete human experience. Just as the theory of the separation of theory and practice has a practical origin and a momentous practical consequence, so the empirical theory that values are identical with whatever men actually enjoy, no matter how or what, formulates an aspect, and an undesirable one, of the present social situation.

For while our discussion has given more attention to the other type of philosophical doctrine, that which holds that regulative and authoritative standards are found in transcendent eternal values, it has not passed in silence over the fact that actually the greater part of the activities of the greater number of human beings is spent in effort to seize upon and hold onto such enjoyments as the actual scene permits. Their energies and their enjoyments are controlled in fact, but they are controlled by external conditions rather than by intelligent judgment and endeavor. If philosophies have any influence over the thoughts and acts of men, it is a serious matter that the most widely held empirical theory should in effect justify this state of

things by identifying values with the objects of any interest as such. As long as the only theories of value placed before us for intellectual assent between sending us to a realm of eternal and fixed values and sending us to enjoyments such as actually obtain, the formulation, even as only a theory, of an experimental empiricism which finds values to be identical with goods that are the fruit of intelligently directed activity has its measure of practical significance.

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tween the problematic data thrown up in our everyday commerce with things and our intelligent responses, which are instrumental for organizing jumbled ideas into pragmatically fruitful hypothesis.

- A *Common Faith*, New Haven, Conn., Yale University Press, 1934, a short book of eighty-seven pages, is Dewey's only work devoted entirely to the philosophy of religion. The main theme here is that supernaturalism is destructive of intelligence, hence evil, and that the religious attitude exists only as a "force of bringing about a better, deeper and enduring adjustment to life" (p. 14). We have already noted (see pp. 160-161) that Dewey was strongly opposed to William James's defense of the rationality of religious beliefs. Certain articles in *The Philosophy of John Dewey* contain challenging discussions of some of Dewey's central views (see especially the articles by Piatt, Russell, Reichenbach, Murphy, Pepper, and Savery). Dewey's replies to his critics at the end of the volume are also interesting.
- Russell's two articles "Pragmatism," *Edinburgh Review*, 209: 428 (April, 1909), 363-388 (reprinted in Russell, *Philosophical Essays*, London, Longmans, Green, & Company, 1910; and his review of Dewey's *Essays on Experimental Logic*, *Journal of Philosophy*, 26: 1 (January 2, 1919), 5-26, contain criticisms of Dewey. Russell charges that Dewey confuses the nature of truth with the criteria for distinguishing truth from falsehood. Under Russell's pressure, Dewey virtually stopped talking about truth, substituting for it the notion of warranted assertion. Dewey and Tufts, *Ethics*, New York, Holt, Rinehart & Winston, Inc., 1932, is a detailed program for unifying a naturalistic ethical theory and everyday practice. Dewey's "Some Questions about Value," *Journal of Philosophy*, 41 (1944), 449-455, discusses "prizing," "evaluating," and the application of the scientific method to testing value judgments.

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part

VI

GEORGE EDWARD MOORE

1873–1958

Introduction

Moore was educated at Cambridge where he began his teaching career in 1911 and became Professor of Philosophy in 1925. After his retirement in 1939, he spent two years in the United States (1940–1942) as Visiting Professor in various American colleges and universities. From 1925 to 1947, he was editor of *Mind*, the leading philosophical periodical.

The teachers who made the most impression on Moore were Henry Sidgwick, James Ward, G. F. Stout, J. M. E. McTaggart and the classical scholar, Henry Jackson. Moore carefully studied Sidgwick's *Methods of Ethics* (1875). A comparison of this book with Moore's own *Principia Ethica* (1903) reveals the considerable debt Moore owes Sidgwick, a debt that Moore, with characteristic candor and generosity, acknowledges in his autobiography.¹

Soon after Moore entered Cambridge in 1892, he met Bertrand Russell. They became lifelong friends. Moore, a year younger than Russell, was Russell's academic junior by two years. It was his friendship with Russell, says Moore, that led him to study philosophy. Russell, Moore, and Wittgenstein are the most prominent and influential analytic philosophers in the first half of the twentieth century. Wittgenstein went to Cambridge in 1911 to study with Russell. Both Russell and Moore admired and encouraged Wittgenstein. He succeeded Moore to the Professorship at Cambridge.

In his autobiography, Moore says that he has been more influenced by Russell than by any other single philosopher. Yet there are very basic differences between Russell and Moore as regards their motivation for engaging in philosophy and their method of doing it. Russell's primary motivation at the beginning certainly was a quest to certify the "truth" of mathematics. Moore, on the other hand, says: "I do not think that the world or the sciences would ever have suggested to me any philosophical problems. What has suggested philosophical problems to me is things which other philosophers have said about the world or the sciences."² This does not mean that philosophers such as Russell were not aware of, or interested in, what other philosophers had said about the world and the sciences. The important difference, which explains to a large extent the nature of Moore's philosophical method, is this. For Russell "what on earth a given philosopher *meant*" would hardly be of intrinsic philosophical interest. Russell wants to get on with the business of finding out what the truth is about such questions as the nature of mathematics, of truth, of belief, of mind, and of matter. Moore, however, writes: "In many problems suggested [by what other philosophers have said about the world and the sciences] I have been (and still am) very keenly interested—the problems in question being mainly of two sorts, namely, first, the problem of trying to get really clear as to what on earth a given philosopher *meant* by something which he said, and, secondly, the problem of discovering what really satisfactory reasons there are for supposing that what he meant was true, or alternately, was false. I think I have been trying to solve problems of this sort all my life. . . ."³ This stimulus (to philosophize about what other philosophers have said), the puzzlement as to *what* exactly they have said and the attempt to render their meaning clear by putting it in terms that anybody can understand prior to assessing their plausibility are the main ingredients of Moore's philosophical method.

Moore's philosophical method—both in theory and practice—his analytical ethics, and his attempts to analyze perception in terms of sense data are his most important and distinctive contributions to twentieth-century philosophy.

His theory and practice of philosophy involves (1) an appeal to common sense, (2) an appeal to ordinary language, and (3) analysis.

In "A Defence of Common Sense," Moore holds that we understand a number of common-sense statements and know with certainty that they are true, although we are frequently puzzled as to their correct analysis. Moore gives a long list of such statements, for example, that there exists at present a living human body which is *my* body, that this body, since its birth, has been at various distances from other bodies and things. These are common-sense beliefs not of the sort exemplified by the belief, natural to anyone ignorant of certain considerations, that the sun moves around the earth, which stands still.

What Moore singles out as components of the Common-Sense view he wishes to defend are statements that all of us constantly believe and cannot help believing. He also argues that if we deny that any of them is true, either our denial is inconsistent with something else that we hold to be true or we are implicated in a special kind of difficulty variously called "pragmatic contradiction" or "contradiction-in-use." A clear example of this would be my now trying to tell you that I do not know how to write in English. In the present

context, what I was trying to tell you, namely, that I do not know how to write in English, is belied by what the context exhibits, namely, that I do know how to write in English. Moore puts it that if any philosopher has ever denied that *any* member of the class of common-sense beliefs is ever true, "it follows from the fact that he has denied it, that he must have been wrong in denying it." Thus, if I were to deny that every statement of the form "*x* is a material object" is true, I would be implicated in a pragmatic contradiction, for if every statement of that form were false, then it would be false that *I* existed, in which case *I* could neither deny nor assert anything. In short, the fact of *my* denying the truth of "there are material objects" belies what my denial says. And if we deny that *some* statements of common sense are certainly true while allowing that some others are certainly true, Moore continues, we are explicitly contradicting ourselves, that is, we are holding a belief that entails two mutually incompatible beliefs. Moore is here attacking those who, he thinks, have said such things as "There have *certainly* existed many human beings beside myself, and none of us has ever known of the existence of any human being beside himself." This patent self-contradiction comes about as follows: Moore's opponent is supposed to be claiming that the proposition "There are other people beside myself" is a proposition of Common Sense, and this claim amounts to expressing the conviction that the proposition in question formulates a belief very commonly entertained by mankind. This much is reflected in "There have *certainly* existed many human beings beside myself." But Moore's opponent also holds that "none of us has ever *known* of the existence of other human beings." However, *if* "There have *certainly* existed many human beings beside myself" is true, then "none of us has ever known of the existence of other people" must be false. And he who asserts these two propositions in conjunction is explicitly contradicting himself. Moore seems to be saying, furthermore, that whereas considerations could be brought against vulgar beliefs such as the one about the sun's moving around the earth, in the case of his list of common-sense statements there are no premises more certain from which we could infer them and no premises more certain from which we could infer their denials.

At this stage we should carefully examine two points. First, Moore never claims that the characteristics he thinks are true of the statements in his list *prove* that those statements are true. Moore insists that any one of them might have been false. It is not inconceivable that I or the machine on which I am typing should not have existed, that there should have been no time, no space, no material things. Not everything can be proved. Some things we have to assume in order to prove anything else. The beliefs of Common Sense are known with certainty to be true not because they are provable from other premises more secure than themselves. We are nevertheless warranted to aver that we know them because there is no reason at all for thinking otherwise.

Second, the admission that common-sense statements are ultimate in the economy of our view of the world without being logically necessary truths is not a good reason at all for doubting that we know them with certainty. This is one of the central points in Moore's position. To grasp the force of his point it is essential to notice that Moore is using "know," "certain," and "true" in one of their relevantly ordinary senses: "I am certain that it is just past noon," "I know that he is in terrible pain," "It is true that he has taught for twenty

years." More often than not statements of this sort are sincere and unassailable. There is, thus, a use of "know," "certain," and "true" that does not presuppose that the things known to be true with certainty are logically necessary. It is in this sense of "know with certainty to be true" that Moore claims to know that he has a body and all the rest of the statements on his list.

In his defense of Common Sense, Moore appeals to ordinary language. If we are to understand one of Moore's significant contributions to philosophy as well as one of his characteristic weaknesses as a philosopher, it is necessary that we see the point of his appeal to ordinary language. This appeal does something fresh and necessary. The enemies of Common Sense had provided elaborate arguments to support their bizarre conclusions. The standard procedure in philosophical controversy prior to Moore had been to attack in detail the argument. Instead of fighting the opposition in the old way by entering a forbidding jungle of metaphysical and epistemological controversy, Moore ignores the details of the opponent's argument. He does not try to prove that McTaggart or Bradley, for instance, are wrong in denying that time is real by trying to deduce or otherwise show from certain incontrovertible metaphysical or epistemological "axioms" that "time is unreal" is a false statement. Moore's proof of the reality of material objects and time is not "proof" in (to use Mill's happy phrase) the ordinary acceptation of that term. Moore does not proceed from recondite philosophical "axioms." Instead, he holds up his hands and says: "Here are two hands, hence, there are at least two material things in the world." Or he points to the fact that he had breakfast some time ago. Hence, time is not unreal. And he rightly insists (a) that no one would fail to understand what he meant by "here are two hands" or by "I had breakfast this morning"; and (b) that if there were genuine doubt (as against methodological doubt such as Descartes' or pathological doubt such as a madman's or drug-induced doubt such as might happen by injecting various chemicals into the body), the means were available for allaying them, for establishing (not, however, proving) the truth of the statements in question with certainty without pretending to have miraculously transformed them into logical necessities. Moore is simply pointing out that a statement such as "here is a human hand" has an ordinary meaning, and that in its ordinary sense it *can* be known with certainty to be true, as "known with certainty to be true" is itself ordinarily used. This cuts the ground from under any philosopher who wants to insist that no one can ever *really* know with certainty that here is a human hand, if that philosopher is using language *in its ordinary sense*. This is a high point of Moore's contribution to philosophical method. If a philosopher is being patently ridiculous *when taken to be using language in its ordinary sense*, he will, or at any rate should, explain himself, tell us how we are to understand him. What is more, Moore's technique forces us into a wider self-examination. To life come such questions as: "What, after all, am I supposed to be doing as a metaphysician, an epistemologist, an analyst . . . ?"

And, of course, it may be that the metaphysician, the epistemologist, the analyst are doing some things that are worth doing. They may, for instance, in saying that we are never *really* certain of such statements as "this is a hand" be trying, albeit confusingly and perhaps confusedly, to draw attention to a genuine difference, namely, the difference between empirical and logical

truth. Or, in saying that time is unreal the metaphysician may be expressing in a misleading way that the common-sense concept of time is not as unproblematic as it appears. Over two thousand years ago, Zeno of Elea denied a common-sense certainty, namely, that motion is real. McTaggart and Bradley are spiritual descendants of Zeno. So that, by briefly explaining what Zeno was driving at, we might furnish an insight into the sort of thing with which Moore was dealing part of the time when he attacked McTaggart and Bradley ("time is unreal," "space is unreal").

Think of an arrow in flight, said Zeno. Now, at any moment in time, either the arrow is where it is at that moment, or it is not where it is at that moment. But it is logically impossible that at the same moment the arrow be where it is not. Therefore, the arrow is where it is at the moment in question. But if this is so, the arrow cannot be moving at that moment. For if it were moving, it would not be where it must, on pain of self-contradiction, be at that moment. This is only one of four arguments Zeno provides to back up his claim that motion, which *appears* to be real (we see things moving all the time), is *really* an illusion because it is logically impossible that there be motion.

Zeno's arguments are no mere exercises in sophistry. They have taxed the ingenuity of some of the world's best mathematicians and philosophers since Zeno's time, and as yet there is no generally accepted solution to the *technical* problem, namely, the problem of providing a conceptual scheme, alternative to Zeno's, within which it will be possible to make assertions that are, in Zeno's scheme, self-contradictory. Even if a solution to the technical problem is provided, the controversy would not end. For there are, on the one hand, men such as Zeno, McTaggart, and Bradley and, on the other hand, such men as Moore, Russell, and Carnap. Every one of these men is highly intelligent, technically competent, and honest. Each one would admit the force of Zeno's arguments and admit, as well, that arrows fly. None would remain complacent knowing that there is a discrepancy between what the testimony of their senses reveals and what reason says. Still, there are two important differences between these men. In case of conflict between reason and experience, the men in the first group would discount experience, whereas the men in the second group would discount what reason seems to require. Second, the men in the first group are happy with the paradoxes that seem to discredit common-sense beliefs to make room for a super- or transempirical reality underlying mere appearance. This is just what in the *Parmenides* Plato says of Zeno. The men in the second group are very unhappy with the paradoxes, and they will exert their ingenuity to the utmost to prove that they are not genuine paradoxes and thereby "save the appearances." Any argument supporting the hypothesis of a reality behind the world of experience without having to posit another world sounds valid to the men of the second group, because they are antecedently convinced that there is no other world to posit. This, I think, is the fundamental reason why we cannot be confident that there will be general agreement that any proposed technical solution is sound.

Moore's appeals to Common Sense and ordinary language are his way of fighting the metaphysical otherworldliness of men like Bradley and McTaggart. Moore's common-sense ploy performs a great and necessary service. It gives us a very powerful technique for deflating the exaggerated claims of anti-

empirical metaphysicians. It also provides a very good start in the diagnosis of what the trouble is with the philosopher's way of pointing to a distinction that may otherwise be perfectly sound. But here we come upon a weakness characteristic of Moore's philosophical method. He is out to debunk the paradox peddlers, and in his apparent zeal to do this he forgets that what in the world a philosopher *means* cannot be decided unless one pays careful attention to the argument behind what he says; and even if such careful examination should reveal that the philosopher is radically confused, simply debunking him is no permanent service. It is much more to the point to worry about *why* on earth a philosopher who peddles paradoxes in a confused and confusing way should be doing this. Surely not because he is downright insane or much more stupid than the rest of mankind. Moore knows very well that McTaggart's and Bradley's paradoxical-sounding statements are subject to more than one interpretation. But, having successfully shown that in their ordinary sense, they are simply incredible, Moore fails to go on with an examination of the other possible senses.* And it is here that the therapeutic analysis of the latter Wittgenstein and his followers, notably John Wisdom, has done something worth doing that Moore omitted to do. But of this more is forthcoming in the introduction to the section on Oxford philosophy (see pp. 508–509). However, we should be less than fully just to Moore if we omitted to say that his debunking zeal is not the central driving force. He has, for instance, spent a very large amount of time studying the doctrines of Russell and his manner of dealing with Russell is wholly devoid of the penchant to debunk.

We now come to Moore's theory and practice of analysis, the third component of his philosophical method.

The point of departure is Moore's distinction between understanding the ordinary meaning of a statement or concept or notion and being able to give a correct analysis of the meaning so understood. This is an extremely important philosophical distinction to draw, and Moore draws it although he never succeeds in making clear just what the distinction is. Again, as will be suggested later (see pp. 501–502), the correct explanation of the distinction is in Wittgenstein's *Philosophical Investigations*, and it may be summed up this way: To understand a linguistic expression is to know how to use it. To give an analysis of the expression so understood is to spell out the complicated scheme of rules governing the use in question. And of course, we can do the former without being able to do the latter. We would, for instance, find it extremely hard to supply an analysis of "chair" when all the time we have no trouble at all in understanding one another's talk about chairs. Moore's *theory* of analysis bars his ever giving this sort of explanation although in practice a good deal of the time he does the sort of thing that not his but the Wittgenstein-like theory of analysis would require. In *Principia Ethica* (esp. Chap. 1, Secs. 6, 7, 8) Moore is very insistent that the analysandum (that which is to be analyzed) is not a linguistic expression but an extralinguistic entity that he variously refers to as an "object," "idea," "notion," "concept." He re-emphasizes this in the section on analysis in

* To understand what a philosopher means by his paradoxical-sounding theses, it is essential to examine in detail the supporting argument. A model of such examination is Michael Dummett's "A Defense of McTaggart's Proof of the Unreality of Time."⁴

his "Reply to My Critics" (see p. 280). One very good reason why he insists on the extralinguistic nature of the analysandum is that he wants to distinguish philosophical analysis from dictionary making and from translation as from French to English. But these distinctions can and should be made without positing mysterious entities as our analysanda. Here is a respect in which Wittgenstein is an advance over Moore.

The distinction itself between understanding and being able to give an analysis is of prime philosophical importance. As early in the history of philosophy as Plato's *Meno*, we find this conundrum. A man cannot inquire at all. For he must inquire either about that which he knows or about that which he does not know. He cannot inquire about that which he knows for he knows, and there is then no point in inquiring. He cannot inquire about that which he does not know, for then he does not know what his inquiry is about (*Meno*, 80E). Let us call this "the misologist's conundrum," for it is a very general rejection of the possibility of *any* inquiry—philosophical, scientific, or any other kind. The paradox of analysis is another related but more restricted conundrum. It says that analysis is either trivial or false. If analysis is the statement of equivalence in meaning between the analysans (that which provides the analysis) and the analysandum, then if the analysans has the same meaning as the analysandum, the analysis is a trivial identity. If, however, the analysans does not have the same meaning as the analysandum, then the analysis is false. In either case, we gain nothing by way of finding out something which, before analysis, we did not know.

Moore is fully aware of the issues involved. He owns that he "is not at all clear as to what the solution of the puzzle is."⁵ And there is no solution as long as the analysandum is taken to be a nonlinguistic entity and analysis is construed essentially as the giving of an equivalence. But if analysis is construed not simply as translation and the analysandum not as something other than a linguistic expression, the paradox of analysis disappears.

Analysis characterizes much of Moore's writings. Yet, we need to give due emphasis to Moore's denial that he has "ever either said or thought or implied that analysis is the only proper business of philosophy! By practicing analysis I may have implied that it is *one* of the proper businesses of philosophy. But I certainly cannot have implied more than that. And, in fact, analysis is by no means the only thing I have tried to do."⁶ In *Some Main Problems of Philosophy*, delivered as lectures in 1910 and published in 1953, Moore wants to find out what sorts of things constitute the ultimate furniture of the universe. In *Principia Ethica*, a book mainly devoted to analytic (as against normative) ethics, Moore has a good deal to say about what sorts of things are worthy of being pursued and cherished, these being the sorts of things that ought to exist. By means of analysis he disposes of such "naturalistic" theories as the view that "good" means pleasure, clearing the way for his own view that many different things, knowledge, friendship, beauty are good intrinsically. Moreover, the appeal to Common Sense and to ordinary language, both of which are distinguishable from analysis, often serve metaphysical ends. They are bases for reaffirming that spatiality and temporality, to take two metaphysical "categories," are ultimate features of the Common-Sense view of the world, and that anyone who denies this is *ipso facto* wrong.

Those familiar with the fact regard it as an anomaly that Moore's *Principia Ethica* should have become a sort of handbook of the good life among the Bloomsbury Group toward the end of the Victorian era.⁷

This is indeed an anomaly first because it is the only known instance of anything written by Moore influencing people outside professional philosophy. Second, unlike Russell and Dewey, Moore seems to have had no appetite at all for participating in social or political action. Lastly, Moore's style and stimulus in philosophy are not in the least suited for soteriological endeavors. We can only surmise that the young intellectuals in the Bloomsbury Group found in Moore's encomia of love, friendship, esthetic grace, knowledge, and the like a liberating alternative to the rigoristic and strait-laced mores of Victorian society. In philosophy, then, Moore did more than analyze, and in at least one instance, the more that he did had unexpected extraphilosophical impact.

We have seen that according to Moore the statements of common sense have an ordinary meaning, and that taken in their ordinary sense they are certainly true. But Moore is very keenly interested in giving an analysis of the ordinary meaning of these statements. Now why should we perform an analysis? How does it help? It is possible to say generally that the point of analysis is to clarify philosophical questions and to help to find the answer to them. What this means, however, can perhaps be brought home best in terms of concrete examples. The examples chosen here are from Moore's analytical ethics and from his analysis of perception.

In Chapter 1 of *Principia Ethica*, Moore's chief concern is to draw a distinction hidden in the grammar of ordinary language. We say, "that thing is red," "that thing is good," "that is red because it has a molecular structure of the following description," "that is good because it is red, ripe and juicy." "Red" and "good" are grammatical predicates. But logically, there is a crucial difference between describing a thing as red and evaluating it as good. To describe and to evaluate are logically distinct functions of language. This is one of the basic truths Moore is struggling to bring out in the open. Unfortunately, his theory of analysis sometimes gets in the way of his better practice with the result that the discussion in *Principia Ethica* is needlessly obscure.

He says, for instance, that we can see the logical simplicity (indefinability, unanalyzability) of the concept good if we hold before our minds the object to which the word "good" refers. This is in line with his theory that analysis is of concepts, extralinguistic entities, and direct intellectual inspection, very similar to phenomenological insight, is an ultimate technique of finding the analysis of what we already know in a familiar sense. But Moore's actual practice is to try very hard to give *arguments* for the unanalyzability of the word "good," and the arguments are of the sort that a Wittgenstein-like theory of analysis would condone. Moore traces the logic of the word "good" by trying to get us to see the similarities and differences between "descriptive" statements such as "this is yellow" and evaluations such as "this is good." He further contrasts or suggests contrasts for us to work out between definitions such as "'good' means conduciveness to pleasure"; analytic statements, such as "murder is wrong"; and synthetic value judgments such as "this is good." He makes it very clear that no moral or evaluative principle can be defended by deriving it directly from a definition. For example, no one can establish it as a principle

of action or of evaluation that things conducive to pleasure and they alone are good on the ground that "good" means conducive to pleasure. Moore thinks that he has a general argument of which the immediately preceding is a corollary. The argument makes use of the "open question." Take any proposed definition of "good," the one above, for example. This is a faulty definition because in ordinary language it is not self-contradictory to say of things not conducive to pleasure that they are good. The open-question technique is conclusive against any infelicitous definition of "good," but the argument applies case by case and not wholesale.

In one sense of the word as Moore uses it, "naturalism" in ethics is any ethical doctrine which has no undefined ethical or evaluative words in it at all.* Moore mistakenly thinks that the open question argument disposes wholesale of naturalism in this sense. He says in Section 13, (2) of *Principia Ethica* that if we apply the open question argument to a succession of definitions, we will come to see that *no* definition will work. If this argument were sound, it would be a corollary of it that no moral or evaluative principle can be defended by appeal to a definition directly because there are no definitions of the sort required. But the open question argument does not work wholesale. Still, it can be independently argued that Moore is right about its being impossible to support an ethical position by direct appeals to definitions of ethical or evaluative terms. The open question argument itself is conclusive against any proposed elucidation of "good" that purports to be about the ordinary language concept "good" but in fact is wrong by the test of ordinary language. This is an important test of adequacy because any analysis of "good" that is not faithful to the ordinary concept is an *ignoratio elenchi*.

Moore's remarks on the nature of perception have exercised epistemologists as much as his analytical ethics has exercised moral philosophers. Because Moore has held so many different views about perception at different times nothing short of a long and detailed account of each could do them justice. Our purpose here fortunately does not require such an account. We want to gain a serviceable impression of what Moore thinks is the point of doing analysis. His analysis of "good" and other evaluative and ethical concepts ("bad," "ought") is meant to dispel certain confusions and errors in moral philosophy. Similarly, his analysis of perceptual propositions is intended to provide an answer to a number of puzzles arising when we reflect on the nature of perception.

These are the familiar puzzles of illusions, hallucinations, after images, the perception of extinct stars and the relativity of the way things appear in various states and locations of observers. Not in all of these cases is there a material object. For example, illusions are erroneous perceptions arising from misjudgments about material objects such as tables and events such as rainbows. Hallucinations, on the other hand, are not occasioned by misjudging the nature of an object or event. The hallucinated drunkard's pink elephants are not brought about by the presence of elephants of any kind. According to Moore, in all of these very different cases, there is a generic feature, the presence of a "sense datum." Although Moore was never satisfied with any of his own characterizations of sense data, he nevertheless believed to the end that in all the above-

* The reader may want to review the allusions to Moore in the introduction to the Dewey selections, pp. 163-164.

mentioned cases we are seeing *something*, not nothing. The drunkard is able to describe *what* he is experiencing; and the rest of us can describe the spot of light representing the extinct star or an after image. Having posited sense data as *entities* of some sort, Moore is then faced with the problem of giving an account of the relation of sense data to material objects and spatiotemporal, although not solid things, such as rainbows. For instance, seen from a certain angle, a round penny will look somewhat elliptical. How is the elliptical sense datum related to the presumably round surface of the penny? Moore argues that the elliptical sense datum cannot be a part of the surface of the round penny. Different people looking at the same penny see sense data with incompatible characteristics. No two such sense data can be a part of the surface of the penny. Hence, not *all* the sense data can be a part of the surface. And there is no reason for identifying any *one* of them with a part of the surface. According to another theory of perception, introduced by Descartes and variously known as "epistemological dualism" or "the representative theory of perception," the sense datum is an appearance of the surface of the penny. Epistemological dualism supposes that there are independently existing material objects which are never perceived. The only way we can "get at" these material objects is by perceiving "representations," "ideas," "appearances" of them. There are standard objections to this theory.⁸ Moore finds some of them sufficiently telling. For example, Berkeley had three objections to epistemological dualism: (1) that the idea of an unperceived material object is self-contradictory; (2) that there is no evidence whatever for believing in the existence of unperceived material objects; and (3) that if we cannot ever compare a material object with any of its appearances, we can never tell which of the appearances truly represent the unperceived material object. Moore thought that he had disposed of the first and second objection. In "The Refutation of Idealism" (1903), one of the most important papers relating to the realism-idealism-phenomenalism controversy, Moore sets out to show that one of the crucial assumptions of Berkeleyan idealism, that the existence of material objects is identical with their being perceived, is false. Hence, the idealist cannot establish that the idea of an unperceived material object is self-contradictory. "A Defence of Common Sense" contains a possible answer to the second objection. That material objects exist even when unperceived, Moore observes, is a belief of Common Sense, hence true, although not capable of being proved and not in need of being proved. These points, to Moore's satisfaction, dispose of Berkeley's first two criticisms. But Moore is impressed by the force of the third objection as well as by other standard objections against the "representative" theory of sense data. Moore finds phenomenalism, a third theory of perception, also unacceptable. Phenomenalism is the view that material-object statements are equivalent to complicated, possibly inexhaustible, conjunctions of statements about sense data. Moore's fundamental objection is that phenomenalism is counter to our Common-Sense belief that material objects exist independently of our actually or possibly perceiving them.

The familiar puzzles of illusion, hallucination, after images, and the rest led Moore to posit sense data. The conviction that there are sense data as well as material objects and that the two sorts of things are somehow related led Moore to suppose that the fundamental problem of the philosophy of perception is this. Just what is the relation between sense data and material objects? Moore

found no answer that satisfied him. His critics suggest that the sense-datum theory generates its own special and unmanageable difficulties, making it impossible to dissipate or solve the familiar puzzles about perceptual phenomena. (See, for example, Gilbert Ryle, *The Concept of Mind*, Chap. 7, pp. 581-617, below. Ryle does not mention Moore by name, but it is evident that Moore, among others, is under attack.)

Moore's critics may be right that he was misled into misidentifying the central question of the philosophy of perception. Even so, Moore's detailed and painstaking philosophical analyses of perception are among the most important contributions to the subject in this century.

G. N.

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The Indefinability of Good

by G . E . MOORE

PREFACE

It appears to me that in Ethics, as in all other philosophical studies, the difficulties and disagreements, of which its history is full, are mainly due to a very simple cause: namely to the attempt to answer questions, without first discovering precisely *what* question it is which you desire to answer. I do not know how far this source of error would be done away, if philosophers would *try* to discover what question they were asking, before they set about to answer it; for the work of analysis and distinction is often very difficult: we may often fail to make the necessary discovery even though we make a definite attempt to do so. But I am inclined to think that in many cases a resolute attempt would be sufficient to ensure success; so that, if only this attempt were made, many of the most glaring difficulties and disagreements in philosophy would disappear. At all events, philosophers seem, in general, not to make the attempt; and, whether in consequence of this omission or not, they are constantly endeavouring to prove that "Yes" or "No" will answer questions, to which *neither* answer is correct, owing to the fact that what they have before their minds is not one question, but several, to some of which the true answer is "No," to others "Yes."

I have tried in this book to distinguish clearly two kinds of question, which moral philosophers have always professed to answer, but which, as I have tried to show, they have almost always confused both with one another and with other questions. These two questions may be expressed, the first in the form: What kind of things ought to exist for their own sakes? the second in the form: What kind of actions ought we to perform? I have tried to show exactly what it is that we ask about a thing, when we ask whether it ought to exist for its own sake, is good in itself or has intrinsic value; and exactly what it is that we ask about an action, when we ask whether we ought to do it, whether it is a right action or a duty.

But from a clear insight into the nature of these two questions, there appears to me to follow a second most important result: namely, what is the nature of the evidence, by which alone any ethical proposition can be proved

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or disproved, confirmed or rendered doubtful. Once we recognise the exact meaning of the two questions, I think it also becomes plain exactly what kind of reasons are relevant as arguments for or against any particular answer to them. It becomes plain that, for answers to the *first* question, no relevant evidence whatever can be adduced: from no other truth, except themselves alone, can it be inferred that they are either true or false. We can guard against error only by taking care, that, when we try to answer a question of this kind, we have before our minds that question only, and not some other or others; but that there is great danger of such errors of confusion I have tried to show, and also what are the chief precautions by the use of which we may guard against them. As for the *second* question, it becomes equally plain, that any answer to it *is* capable of proof or disproof—that, indeed, so many different considerations are relevant to its truth or falsehood, as to make the attainment of probability very difficult, and the attainment of certainty impossible. Nevertheless the *kind* of evidence, which is both necessary and alone relevant to such proof and disproof, is capable of exact definition. Such evidence must contain propositions of two kinds and of two kinds only: it must consist, in the first place, of truths with regard to the results of the action in question—of *causal* truths—but it must *also* contain ethical truths of our first or self-evident class. Many truths of both kinds are necessary to the proof that any action ought to be done; and any other kind of evidence is wholly irrelevant. It follows that, if any ethical philosopher offers for propositions of the first kind any evidence whatever, or if, for propositions of the second kind, he either fails to adduce both causal and ethical truths, or adduces truths that are neither, his reasoning has not the least tendency to establish his conclusions. But not only are his conclusions totally devoid of weight: we have, moreover, reason to suspect him of the error of confusion; since the offering of irrelevant evidence generally indicates that the philosopher who offers it has had before his mind, not the question which he professes to answer, but some other entirely different one. Ethical discussion, hitherto, has perhaps consisted chiefly in reasoning of this totally irrelevant kind.

One main object of this book may, then, be expressed by slightly changing one of Kant's famous titles. I have endeavoured to write "Prolegomena to any future Ethics that can possibly pretend to be scientific." In other words, I have endeavoured to discover what are the fundamental principles of ethical reasoning; and the establishment of these principles, rather than of any conclusions which may be attained by their use, may be regarded as my main object. I have, however, also attempted, in Chapter VI, to present some conclusions, with regard to the proper answer of the question "What is good in itself?" which are very different from any which have commonly been advocated by philosophers. I have tried to define the classes within which all great goods and evils fall; and I have maintained that very many different things are good and evil in themselves, and that neither class of

things possesses any other property which is both common to all its members and peculiar to them.

In order to express the fact that ethical propositions of my *first* class are incapable of proof or disproof, I have sometimes followed Sidgwick's usage in calling them "Intuitions." But I beg it may be noticed that I am not an "Intuitionist," in the ordinary sense of the term. Sidgwick himself seems never to have been clearly aware of the immense importance of the difference which distinguishes his Intuitionism from the common doctrine, which has generally been called by that name. The Intuitionist proper is distinguished by maintaining that propositions of my second class—propositions which assert that a certain action is *right* or a *duty*—are incapable of proof or disproof by an enquiry into the results of such actions. I, on the contrary, am no less anxious to maintain that propositions of *this* kind are *not* "Intuitions," than to maintain that propositions of my *first* class *are* Intuitions.

Again, I would wish it observed that, when I call such propositions "Intuitions," I mean *merely* to assert that they are incapable of proof; I imply nothing whatever as to the manner or origin of our cognition of them. Still less do I imply (as most intuitionists have done) that any proposition whatever is true, *because* we cognise it in a particular way or by the exercise of any particular faculty: I hold, on the contrary, that in every way in which it is possible to cognise a true proposition, it also is possible to cognise a false one.

When this book had been already completed, I found, in Brentano's "Origin of the Knowledge of Right and Wrong," opinions far more closely resembling my own, than those of any other ethical writer with whom I am acquainted. Brentano appears to agree with me completely (1) in regarding all ethical propositions as defined by the fact that they predicate a single unique objective concept; (2) in dividing such propositions sharply into the same two kinds; (3) in holding that the first kind are incapable of proof; and (4) with regard to the kind of evidence which is necessary and relevant to the proof of the second kind. But he regards the fundamental ethical concept as being, not the simple one which I denote by "good," but the complex one which I have taken to define "beautiful"; and he does not recognise, but even denies by implication, the principle which I have called *the principle of organic unities*. In consequence of these two differences, his conclusions as to what things are good in themselves, also differ very materially from mine. He agrees, however, that there are many different goods, and that the love of good and beautiful objects constitutes an important class among them.

I wish to refer to one oversight, of which I became aware only when it was too late to correct it, and which may, I am afraid, cause unnecessary trouble to some readers. I have omitted to discuss directly the mutual relations of the several different notions, which are all expressed by the word "end." The consequences of this omission may perhaps be partially avoided

by a reference to my article on "Teleology" in Baldwin's *Dictionary of Philosophy and Psychology*.

If I were to rewrite my work now, I should make a very different, and I believe that I could make a much better book. But it may be doubted whether, in attempting to satisfy myself, I might not merely render more obscure the ideas which I am most anxious to convey, without a corresponding gain in completeness and accuracy. However that may be, my belief that to publish the book as it stands was probably the best thing I could do, does not prevent me from being painfully aware that it is full of defects.

CHAPTER I. THE SUBJECT-MATTER OF ETHICS

1. It is very easy to point out some among our every-day judgments, with the truth of which Ethics is undoubtedly concerned. Whenever we say, "So and so is a good man," or "That fellow is a villain"; whenever we ask, "What ought I to do?" or "Is it wrong for me to do like this?"; whenever we hazard such remarks as "Temperance is a virtue and drunkenness a vice"—it is undoubtedly the business of Ethics to discuss such questions and such statements; to argue what is the true answer when we ask what it is right to do, and to give reasons for thinking that our statements about the character of persons or the morality of actions are true or false. In the vast majority of cases, where we make statements involving any of the terms "virtue," "vice," "duty," "right," "ought," "good," "bad," we are making ethical judgments; and if we wish to discuss their truth, we shall be discussing a point of Ethics.

So much as this is not disputed; but it falls very short of defining the province of Ethics. That province may indeed be defined as the whole truth about that which is at the same time common to all such judgments and peculiar to them. But we have still to ask the question: What is it that is thus common and peculiar? And this is a question to which very different answers have been given by ethical philosophers of acknowledged reputation, and none of them, perhaps, completely satisfactory.

2. If we take such examples as those given above, we shall not be far wrong in saying that they are all of them concerned with the question of "conduct"—with the question, what, in the conduct of us, human beings, is good, and what is bad, what is right, and what is wrong. For when we say that a man is good, we commonly mean that he acts rightly; when we say that drunkenness is a vice, we commonly mean that to get drunk is a wrong or wicked action. And this discussion of human conduct is, in fact, that with which the name "Ethics" is most intimately associated. It is so associated by derivation; and conduct is undoubtedly by far the commonest and most generally interesting object of ethical judgments.

Accordingly, we find that many ethical philosophers are disposed to accept as an adequate definition of "Ethics" the statement that it deals with the question what is good or bad in human conduct. They hold that its enquiries are properly confined to "conduct" or to "practice"; they hold that the name "practical philosophy" covers all the matter with which it has to do. Now, without discussing the proper meaning of the word (for verbal questions are properly left to the writers of dictionaries and other persons interested in literature; philosophy, as we shall see, has no concern with them), I may say that I intend to use "Ethics" to cover more than this—a usage, for which there is, I think, quite sufficient authority. I am using it to cover an enquiry for which, at all events, there is no other word: the general enquiry into what is good.

Ethics is undoubtedly concerned with the question what good conduct is; but, being concerned with this, it obviously does not start at the beginning, unless it is prepared to tell us what is good as well as what is conduct. For "good conduct" is a complex notion: all conduct is not good; for some is certainly bad and some may be indifferent. And on the other hand, other things, beside conduct, may be good; and if they are so, then, "good" denotes some property, that is common to them and conduct; and if we examine good conduct alone of all good things, then we shall be in danger of mistaking for this property, some property which is not shared by those other things; and thus we shall have made a mistake about Ethics even in this limited sense; for we shall not know what good conduct really is. This is a mistake which many writers have actually made, from limiting their enquiry to conduct. And hence I shall try to avoid it by considering first what is good in general; hoping, that if we can arrive at any certainty about this, it will be much easier to settle the question of good conduct; for we all know pretty well what "conduct" is. This, then, is our first question: What is good? and What is bad? and to the discussion of this question (or these questions) I give the name of Ethics, since that science must, at all events, include it.

3. But this is a question which may have many meanings. If, for example, each of us were to say "I am doing good now" or "I had a good dinner yesterday," these statements would each of them be some sort of answer to our question, although perhaps a false one. So, too, when A asks B what school he ought to send his son to, B's answer will certainly be an ethical judgment. And similarly all distribution of praise or blame to any personage or thing that has existed, now exists, or will exist, does give some answer to the question "What is good?" In all such cases some particular thing is judged to be good or bad: the question "What?" is answered by "This." But this is not the sense in which a scientific Ethics asks the question. Not one, of all the many million answers of this kind, which must be true, can form a part of an ethical system; although that science must contain reasons and principles sufficient for deciding on the truth of all of them. There are far too

many persons, things and events in the world, past, present, or to come, for a discussion of their individual merits to be embraced in any science. Ethics, therefore, does not deal at all with facts of this nature, facts that are unique, individual, absolutely particular; facts with which such studies as history, geography, astronomy, are compelled, in part at least, to deal. And, for this reason, it is not the business of the ethical philosopher to give personal advice or exhortation.

4. But there is another meaning which may be given to the question "What is good?" "Books are good" would be an answer to it, though an answer obviously false; for some books are very bad indeed. And ethical judgments of this kind do indeed belong to Ethics; though I shall not deal with many of them. Such is the judgment "Pleasure is good"—a judgment, of which Ethics should discuss the truth, although it is not nearly as important as that other judgment, with which we shall be much occupied presently—"Pleasure *alone* is good." It is judgments of this sort, which are made in such books on Ethics as contain a list of "virtues"—in Aristotle's *Ethics* for example. But it is judgments of precisely the same kind, which form the substance of what is commonly supposed to be a study different from Ethics, and one much less respectable—the study of Casuistry. We may be told that Casuistry differs from Ethics, in that it is much more detailed and particular, Ethics much more general. But it is most important to notice that Casuistry does not deal with anything that is absolutely particular—particular in the only sense in which a perfectly precise line can be drawn between it and what is general. But it is not particular in the sense just noticed, the sense in which this book is a particular book, and A's friend's advice particular advice. Casuistry may indeed be *more* particular and Ethics *more* general; but that means that they differ only in degree and not in kind. And this is universally true of "particular" and "general," when used in this common, but inaccurate, sense. So far as Ethics allows itself to give lists of virtues or even to name constituents of the Ideal, it is indistinguishable from Casuistry. Both alike deal with what is general, in the sense in which physics and chemistry deal with what is general. Just as chemistry aims at discovering what are the properties of oxygen, *wherever it occurs*, and not only of this or that particular specimen of oxygen; so Casuistry aims at discovering what actions are good, *whenever they occur*. In this respect Ethics and Casuistry alike are to be classed with such sciences as physics, chemistry and physiology, in their absolute distinction from those of which history and geography are instances. And it is to be noted that, owing to their detailed nature, casuistical investigations are actually nearer to physics and to chemistry than are the investigations usually assigned to Ethics. For just as physics cannot rest content with the discovery that light is propagated by waves of ether, but must go on to discover the particular nature of the ether-waves corresponding to each several colour; so Casuistry, not content with the general law that charity is a virtue, must attempt to

discover the relative merits of every different form of charity. Casuistry forms, therefore, part of the ideal of ethical science: Ethics cannot be complete without it. The defects of Casuistry are not defects of principle; no objection can be taken to its aim and object. It has failed only because it is far too difficult a subject to be treated adequately in our present state of knowledge. The casuist has been unable to distinguish, in the cases which he treats, those elements upon which their value depends. Hence he often thinks two cases to be alike in respect of value, when in reality they are alike only in some other respect. It is to mistakes of this kind that the pernicious influence of such investigations has been due. For Casuistry is the goal of ethical investigation. It cannot be safely attempted at the beginning of our studies, but only at the end.

5. But our question "What is good?" may have still another meaning. We may, in the third place, mean to ask, not what thing or things are good, but how "good" is to be defined. This is an enquiry which belongs only to Ethics, not to Casuistry; and this is the enquiry which will occupy us first.

It is an enquiry to which most special attention should be directed; since this question, how "good" is to be defined, is the most fundamental question in all Ethics. That which is meant by "good" is, in fact, except its converse "bad," the *only* simple object of thought which is peculiar to Ethics. Its definition is, therefore, the most essential point in the definition of Ethics; and moreover a mistake with regard to it entails a far larger number of erroneous ethical judgments than any other. Unless this first question be fully understood, and its true answer clearly recognised, the rest of Ethics is as good as useless from the point of view of systematic knowledge. True ethical judgments, of the two kinds last dealt with, may indeed be made by those who do not know the answer to this question as well as by those who do; and it goes without saying that the two classes of people may lead equally good lives. But it is extremely unlikely that the *most general* ethical judgments will be equally valid, in the absence of a true answer to this question: I shall presently try to shew that the gravest errors have been largely due to beliefs in a false answer. And, in any case, it is impossible that, till the answer to this question be known, any one should know *what is the evidence* for any ethical judgment whatsoever. But the main object of Ethics, as a systematic science, is to give correct *reasons* for thinking that this or that is good; and, unless this question be answered, such reasons cannot be given. Even, therefore, apart from the fact that a false answer leads to false conclusions, the present enquiry is a most necessary and important part of the science of Ethics.

6. What, then, is good? How is good to be defined? Now, it may be thought that this is a verbal question. A definition does indeed often mean the expressing of one word's meaning in other words. But this is not the sort of definition I am asking for. Such a definition can never be of ultimate importance in any study except lexicography. If I wanted that kind of defini-

tion I should have to consider in the first place how people generally used the word "good"; but my business is not with its proper usage, as established by custom. I should, indeed, be foolish, if I tried to use it for something which it did not usually denote: if, for instance, I were to announce that, whenever I used the word "good," I must be understood to be thinking of that object which is usually denoted by the word "table." I shall, therefore, use the word in the sense in which I think it is ordinarily used; but at the same time I am not anxious to discuss whether I am right in thinking that it is so used. My business is solely with that object or idea, which I hold, rightly or wrongly, that the word is generally used to stand for. What I want to discover is the nature of that object or idea, and about this I am extremely anxious to arrive at an agreement.

But, if we understand the question in this sense, my answer to it may seem a very disappointing one. If I am asked "What is good?" my answer is that good is good, and that is the end of the matter. Or if I am asked "How is good to be defined?" my answer is that it cannot be defined, and that is all I have to say about it. But disappointing as these answers may appear, they are of the very last importance. To readers who are familiar with philosophic terminology, I can express their importance by saying that they amount to this: That propositions about the good are all of them synthetic and never analytic; and that is plainly no trivial matter. And the same thing may be expressed more popularly, by saying that, if I am right, then nobody can foist upon us such an axiom as that "Pleasure is the only good" or that "The good is the desired" on the pretence that this is "the very meaning of the word."

7. Let us, then, consider this position. My point is that "good" is a simple notion, just as "yellow" is a simple notion; that, just as you cannot, by any manner of means, explain to anyone who does not already know it, what yellow is, so you cannot explain what good is. Definitions of the kind that I was asking for, definitions which describe the real nature of the object or notion denoted by a word, and which do not merely tell us what the word is used to mean, are only possible when the object or notion in question is something complex. You can give a definition of a horse, because a horse has many different properties and qualities, all of which you can enumerate. But when you have enumerated them all, when you have reduced a horse to his simplest terms, then you can no longer define those terms. They are simply something which you think of or perceive, and to any one who cannot think of or perceive them, you can never by any definition, make their nature known. It may perhaps be objected to this that we are able to describe to others, objects which they have never seen or thought of. We can, for instance, make a man understand what a chimaera is, although he has never heard of one or seen one. You can tell him that it is an animal with a lioness's head and body, with a goat's head growing from the middle of its back, and with a snake in place of a tail. But here the object which you are describ-

ing is a complex object; it is entirely composed of parts, with which we are all perfectly familiar—a snake, a goat, a lioness; and we know, too, the manner in which those parts are to be put together, because we know what is meant by the middle of a lioness's back, and where her tail is wont to grow. And so it is with all objects, not previously known, which we are able to define: they are all complex; all composed of parts, which may themselves in the first instance, be capable of similar definition, but which must in the end be reducible to simplest parts, which can no longer be defined. But yellow and good, we say, are not complex: they are notions of that simple kind, out of which definitions are composed and with which the power of further defining ceases.

8. When we say, as Webster says, "The definition of horse is 'A hoofed quadruped of the genus *Equus*,'" we may, in fact, mean three different things. (1) We may mean merely: "When I say 'horse,' you are to understand that I am talking about a hoofed quadruped of the genus *Equus*." This might be called the arbitrary verbal definition: and I do not mean that good is indefinable in that sense. (2) We may mean, as Webster ought to mean: "When most English people say 'horse,' they mean a hoofed quadruped of the genus *Equus*." This may be called the verbal definition proper, and I do not say that good is indefinable in this sense either; for it is certainly possible to discover how people use a word: otherwise, we could never have known that "good" may be translated by "*gut*" in German and by "*bon*" in French. But (3) we may, when we define horse, mean something much more important. We may mean that a certain object, which we all of us know, is composed in a certain manner: that it has four legs, a head, a heart, a liver, etc., etc., all of them arranged in definite relations to one another. It is in this sense that I deny good to be definable. I say that it is not composed of any parts, which we can substitute for it in our minds when we are thinking of it. We might think just as clearly and correctly about a horse, if we thought of all its parts and their arrangement instead of thinking of the whole: we could, I say, think how a horse differed from a donkey just as well, just as truly, in this way, as now we do, only not so easily; but there is nothing whatsoever which we could so substitute for good; and that is what I mean, when I say that good is indefinable.

9. But I am afraid I have still not removed the chief difficulty which may prevent acceptance of the proposition that good is indefinable. I do not mean to say that *the* good, that which is good, is thus indefinable; if I did think so, I should not be writing on Ethics, for my main object is to help towards discovering that definition. It is just because I think there will be less risk of error in our search for a definition of "the good," that I am now insisting that *good* is indefinable. I must try to explain the difference between these two. I suppose it may be granted that "good" is an adjective. Well "the good," "that which is good," must therefore be the substantive to which the adjective "good" will apply: it must be the whole of that to which the

adjective will apply, and the adjective must *always* truly apply to it. But if it is that to which the adjective will apply, it must be something different from that adjective itself; and the whole of that something different, whatever it is, will be our definition of *the* good. Now it may be that this something will have other adjectives, beside "good," that will apply to it. It may be full of pleasure, for example: it may be intelligent: and if these two adjectives are really part of its definition, then it will certainly be true, that pleasure and intelligence are good. And many people appear to think that, if we say "Pleasure and intelligence are good," or if we say "Only pleasure and intelligence are good," we are defining "good." Well, I cannot deny that propositions of this nature may sometimes be called definitions; I do not know well enough how the word is generally used to decide upon this point. I only wish it to be understood that that is not what I mean when I say there is no possible definition of good, and that I shall not mean this if I use the word again. I do most fully believe that some true proposition of the form "Intelligence is good and intelligence alone is good" can be found; if none could be found, our definition of *the* good would be impossible. As it is, I believe *the* good to be definable; and yet I still say that good itself is indefinable.

10. "Good," then, if we mean by it that quality which we assert to belong to a thing when we say that the thing is good, is incapable of any definition, in the most important sense of that word. The most important sense of "definition" is that in which a definition states what are the parts which invariably compose a certain whole; and in this sense "good" has no definition because it is simple and has no parts. It is one of those innumerable objects of thought which are themselves incapable of definition, because they are the ultimate terms by reference to which whatever *is* capable of definition must be defined. That there must be an indefinite number of such terms is obvious, on reflection; since we cannot define anything except by an analysis, which, when carried as far as it will go, refers us to something, which is simply different from anything else, and which by that ultimate difference explains the peculiarity of the whole which we are defining: for every whole contains some parts which are common to other wholes also. There is, therefore, no intrinsic difficulty in the contention that "good" denotes a simple and indefinable quality. There are many other instances of such qualities.

Consider yellow, for example. We may try to define it, by describing its physical equivalent; we may state what kind of light-vibrations must stimulate the normal eye, in order that we may perceive it. But a moment's reflection is sufficient to shew that those light-vibrations are not themselves what we mean by yellow. *They* are not what we perceive. Indeed we should never have been able to discover their existence, unless we had first been struck by the patent difference of quality between the different colours. The

most we can be entitled to say of those vibrations is that they are what corresponds in space to the yellow which we actually perceive.

Yet a mistake of this simple kind has commonly been made about "good." It may be true that all things which are good are *also* something else, just as it is true that all things which are yellow produce a certain kind of vibration in the light. And it is a fact, that Ethics aims at discovering what are those other properties belonging to all things which are good. But far too many philosophers have thought that when they named those other properties they were actually defining good; that these properties, in fact, were simply not "other," but absolutely and entirely the same with goodness. This view I propose to call the "naturalistic fallacy" and of it I shall now endeavour to dispose.

11. Let us consider what it is such philosophers say. And first it is to be noticed that they do not agree among themselves. They not only say that they are right as to what good is, but they endeavour to prove that other people who say that it is something else, are wrong. One, for instance, will affirm that good is pleasure, another, perhaps, that good is that which is desired; and each of these will argue eagerly to prove that the other is wrong. But how is that possible? One of them says that good is nothing but the object of desire, and at the same time tries to prove that it is not pleasure. But from his first assertion, that good just means the object of desire, one of two things must follow as regards his proof:

(1) He may be trying to prove that the object of desire is not pleasure. But, if this be all, where is his Ethics? The position he is maintaining is merely a psychological one. Desire is something which occurs in our minds, and pleasure is something else which so occurs; and our would-be ethical philosopher is merely holding that the latter is not the object of the former. But what has that to do with the question in dispute? His opponent held the ethical proposition that pleasure was the good, and although he should prove a million times over the psychological proposition that pleasure is not the object of desire, he is no nearer proving his opponent to be wrong. The position is like this. One man says a triangle is a circle: another replies "A triangle is a straight line, and I will prove to you that I am right: for (this is the only argument) a straight line is not a circle." "That is quite true," the other may reply; "but nevertheless a triangle is a circle, and you have said nothing whatever to prove the contrary. What is proved is that one of us is wrong, for we agree that a triangle cannot be both a straight line and a circle: but which is wrong, there can be no earthly means of proving, since you define triangle as straight line and I define it as circle."—Well, that is one alternative which any naturalistic Ethics has to face; if good is *defined* as something else, it is then impossible either to prove that any other definition is wrong or even to deny such definition.

(2) The other alternative will scarcely be more welcome. It is that the discussion is after all a verbal one. When A says "Good means pleasant" and

B says "Good means desired," they may merely wish to assert that most people have used the word for what is pleasant and for what is desired respectively. And this is quite an interesting subject for discussion: only it is not a whit more an ethical discussion than the last was. Nor do I think that any exponent of naturalistic Ethics would be willing to allow that this was all he meant. They are all so anxious to persuade us that what they call the good is what we really ought to do. "Do, pray, act so, because the word 'good' is generally used to denote actions of this nature": such, on this view, would be the substance of their teaching. And in so far as they tell us how we ought to act, their teaching is truly ethical, as they mean it to be. But how perfectly absurd is the reason they would give for it! "You are to do this, because most people use a certain word to denote conduct such as this." "You are to say the thing which is not, because most people call it lying." That is an argument just as good!—My dear sirs, what we want to know from you as ethical teachers, is not how people use a word; it is not even, what kind of actions they approve, which the use of this word "good" may certainly imply: what we want to know is simply what *is* good. We may indeed agree that what most people do think good, is actually so; we shall at all events be glad to know their opinions: but when we say their opinions about what *is* good, we do mean what we say; we do not care whether they call that thing which they mean "horse" or "table" or "chair," "*gut*," or "*bon*" or "*αγαθος*"; we want to know what it is that they so call. When they say "Pleasure is good," we cannot believe that they merely mean "Pleasure is pleasure" and nothing more than that.

12. Suppose a man says "I am pleased"; and suppose that is not a lie or a mistake but the truth. Well, if it is true, what does that mean? It means that his mind, a certain definite mind, distinguished by certain definite marks from all others, has at this moment a certain definite feeling called pleasure. "Pleased" *means* nothing but having pleasure, and though we may be more pleased or less pleased, and even, we may admit for the present, have one or another kind of pleasure; yet in so far as it is pleasure, we have, whether there be more or less of it, and whether it be of one kind or another, what we have is one definite thing, absolutely undefinable, some one thing that is the same in all the various degrees and in all the various kinds of it that there may be. We may be able to say how it is related to other things: that, for example, it is in the mind, that it causes desire, that we are conscious of it, etc., etc. We can, I say, describe its relations to other things, but define it we can *not*. And if anybody tried to define pleasure for us as being any other natural object; if anybody were to say, for instance, that pleasure means the sensation of red, and were to proceed to deduce from that that pleasure is a colour, we should be entitled to laugh at him and to distrust his future statements about pleasure. Well, that would be the same fallacy which I have called the naturalistic fallacy. That "pleased" does not mean "having the sensation of red," or anything else whatever, does not prevent us from

understanding what it does mean. It is enough for us to know that "pleased" does mean "having the sensation of pleasure," and though pleasure is absolutely indefinable, though pleasure is pleasure and nothing else whatever, yet we feel no difficulty in saying that we are pleased. The reason is, of course, that when I say "I am pleased," I do *not* mean that "I" am the same thing as "having pleasure." And similarly no difficulty need be found in my saying that "pleasure is good" and yet not meaning that "pleasure" is the same thing as "good," that pleasure *means* good, and that good *means* pleasure. If I were to imagine that when I said "I am pleased," I meant that I was exactly the same thing as "pleased," I should not indeed call that a naturalistic fallacy, as I have called naturalistic with reference to Ethics. The reason of this is obvious enough. When a man confuses two natural objects with one another, defining the one by the other, if for instance, he confuses himself, who is one natural object, with "pleased" or with "pleasure" which are others, then there is no reason to call the fallacy naturalistic. But if he confuses "good," which is not in the same sense a natural object, with any natural object whatever, then there is a reason for calling that a naturalistic fallacy; its being made with regard to "good" marks it as something quite specific, and this specific mistake deserves a name because it is so common. As for the reasons why good is not to be considered a natural object, they may be reserved for discussion in another place. But, for the present, it is sufficient to notice this: Even if it were a natural object, that would not alter the nature of the fallacy nor diminish its importance one whit. All that I have said about it would remain quite equally true: only the name which I have called it would not be so appropriate as I think it is. And I do not care about the name: what I do care about is the fallacy. It does not matter what we call it, provided we recognize it when we meet with it. It is to be met with in almost every book on Ethics; and yet it is not recognized: and that is why it is necessary to multiply illustrations of it, and convenient to give it a name. It is a very simple fallacy indeed. When we say that an orange is yellow, we do not think our statement binds us to hold that "orange" means nothing else than "yellow," or that nothing can be yellow but an orange. Supposing the orange is also sweet! Does that bind us to say that "sweet" is exactly the same thing as "yellow," that "sweet" must be defined as "yellow"? And supposing it be recognized that "yellow" just means "yellow" and nothing else whatever, does that make it any more difficult to hold that oranges are yellow? Most certainly it does not: on the contrary, it would be absolutely meaningless to say that oranges were yellow unless yellow did in the end mean just "yellow" and nothing else whatever, unless it was absolutely indefinable. We should not get any very clear notion about things, which are yellow—we should not get very far with our science, if we were bound to hold that everything which was yellow, *meant* exactly the same thing as yellow. We should find we had to hold that an orange was exactly the same thing as a stool, a piece of paper, a lemon, anything you like. We

could prove any number of absurdities; but should we be the nearer to the truth? Why then, should it be different with "good"? Why, if good is good and indefinable, should I be held to deny that pleasure is good? Is there any difficulty in holding both to be true at once? On the contrary, there is no meaning in saying that pleasure is good, unless good is something different from pleasure. It is absolutely useless, so far as Ethics is concerned, to prove, as Mr. Spencer tries to do, that increase of pleasure coincides with increase of life, unless good *means* something different from either life or pleasure. He might just as well try to prove that an orange is yellow by shewing that it always is wrapped up in paper.

13. In fact, if it is not the case that "good" denotes something simple and indefinable, only two alternatives are possible: either it is a complex, a given whole, about the correct analysis of which there may be disagreement; or else it means nothing at all, and there is no such subject as Ethics. In general, however, ethical philosophers have attempted to define good, without recognising what such an attempt must mean. They actually use arguments which involve one or both of the absurdities considered in §11. We are, therefore, justified in concluding that the attempt to define good is chiefly due to want of clearness as to the possible nature of definition. There are, in fact, only two serious alternatives to be considered, in order to establish the conclusion that "good" does denote a simple and indefinable notion. It might possibly denote a complex, as "horse" does; or it might have no meaning at all. Neither of these possibilities has, however, been clearly conceived and seriously maintained, as such, by those who presume to define good; and both may be dismissed by a simple appeal to facts.

(1) The hypothesis that disagreement about the meaning of good is disagreement with regard to the correct analysis of a given whole, may be most plainly seen to be incorrect by consideration of the fact that, whatever definition be offered, it may be always asked, with significance, of the complex so defined, whether it is itself good. To take, for instance, one of the more plausible, because one of the more complicated, of such proposed definitions, it may easily be thought, at first sight, that to be good may mean to be that which we desire to desire. Thus if we apply this definition to a particular instance and say "When we think that A is good, we are thinking that A is one of the things which we desire to desire," our proposition may seem quite plausible. But, if we carry the investigation further, and ask ourselves "Is it good to desire to desire A?" it is apparent, on a little reflection, that this question is itself as intelligible, as the original question "Is A good?"—that we are, in fact, now asking for exactly the same information about the desire to desire A, for which we formerly asked with regard to A itself. But it is also apparent that the meaning of this second question cannot be correctly analysed into "Is the desire to desire A one of the things which we desire to desire?"; we have not before our minds anything so complicated as the question "Do we desire to desire to desire to desire A?" Moreover any

one can easily convince himself by inspection that the predicate of this proposition—"good"—is positively different from the notion of "desiring to desire" which enters into its subject: "That we should desire to desire A is good" is *not* merely equivalent to "That A should be good is good." It may indeed be true that what we desire to desire is always also good; perhaps, even the converse may be true: but it is very doubtful whether this is the case, and the mere fact that we understand very well what is meant by doubting it, shews clearly that we have two different notions before our minds.

(2) And the same consideration is sufficient to dismiss the hypothesis that "good" has no meaning whatsoever. It is very natural to make the mistake of supposing that what is universally true is of such a nature that its negation would be self-contradictory: the importance which has been assigned to analytic propositions in the history of philosophy shews how easy such a mistake is. And thus it is very easy to conclude that what seems to be a universal ethical principle is in fact an identical proposition; that, if, for example, whatever is called "good" seems to be pleasant, the proposition "Pleasure is the good" does not assert a connection between two different notions, but involves only one, that of pleasure, which is easily recognised as a distinct entity. But whoever will attentively consider with himself what is actually before his mind when he asks the question "Is pleasure (or whatever it may be) after all good?" can easily satisfy himself that he is not merely wondering whether pleasure is pleasant. And if he will try this experiment with each suggested definition in succession, he may become expert enough to recognise that in every case he has before his mind a unique object, with regard to the connection of which with any other object, a distinct question may be asked. Every one does in fact understand the question "Is this good?" When he thinks of it, his state of mind is different from what it would be, were he asked "Is this pleasant, or desired, or approved?" It has a distinct meaning for him, even though he may not recognise in what respect it is distinct. Whenever he thinks of "intrinsic value," or "intrinsic worth," or says that a thing "ought to exist," he has before his mind the unique object—the unique property of things—which I mean by "good." Everybody is constantly aware of this notion, although he may never become aware at all that it is different from other notions of which he is also aware. But, for correct ethical reasoning, it is extremely important that he should become aware of this fact; and, as soon as the nature of the problem is clearly understood, there should be little difficulty in advancing so far in analysis.

14. "Good," then, is indefinable; and yet, so far as I know, there is only one ethical writer, Prof. Henry Sidgwick, who has clearly recognised and stated this fact. We shall see, indeed, how far many of the most reputed ethical systems fall short of drawing the conclusions which follow from such a recognition. At present I will only quote one instance, which will serve to illustrate the meaning and importance of this principle that "good" is inde-

finable, or, as Prof. Sidgwick says, an "unanalysable notion." It is an instance to which Prof. Sidgwick himself refers in a note on the passage, in which he argues that "ought" is unanalysable.

"Bentham," says Sidgwick, "explains that his fundamental principle 'states the greatest happiness of all those whose interest is in question as being the right and proper end of human action'; and yet 'his language in other passages of the same chapter would seem to imply' that he *means* by the word 'right' conducive to the general happiness. Prof. Sidgwick sees that, if you take these two statements together, you get the absurd result that 'greatest happiness is the end of human action, which is conducive to the general happiness'; and so absurd does it seem to him to call this result, as Bentham calls it, 'the fundamental principle of a moral system,' that he suggests that Bentham cannot have meant it. Yet Prof. Sidgwick himself states elsewhere that Psychological Hedonism is 'not seldom confounded with Egoistic Hedonism'; and that confusion, as we shall see, rests chiefly on that same fallacy, the naturalistic fallacy, which is implied in Bentham's statements. Prof. Sidgwick admits therefore that this fallacy is sometimes committed, absurd as it is; and I am inclined to think that Bentham may really have been one of those who committed it. Mill, as we shall see, certainly did commit it. In any case, whether Bentham committed it or not, his doctrine as above quoted, will serve as a very good illustration of this fallacy, and of the importance of the contrary proposition that good is indefinable.

Let us consider this doctrine. Bentham seems to imply, so Prof. Sidgwick says, that the word "right" *means* "conducive to general happiness." Now this, by itself, need not necessarily involve the naturalistic fallacy. For the word "right" is very commonly appropriated to actions which lead to the attainment of what is good; which are regarded as *means* to the ideal and not as ends-in-themselves. This use of "right," as denoting what is good as a means, whether or not it be also good as an end, is indeed the use to which I shall confine the word. Had Bentham been using "right" in this sense, it might be perfectly consistent for him to *define* right as "conducive to the general happiness," *provided only* (and notice this proviso) he had already proved, or laid down as an axiom, that general happiness was the good, or (what is equivalent to this) that general happiness alone was good. For in that case he would have already defined *the* good as general happiness (a position perfectly consistent, as we have seen, with the contention that "good" is indefinable), and, since right was to be defined as "conducive to *the* good," it would actually *mean* "conducive to general happiness." But this method of escape from the charge of having committed the naturalistic fallacy has been closed by Bentham himself. For his fundamental principle is, we see, that the greatest happiness of all concerned is the *right* and proper *end* of human action. He applies the word "right," therefore, to the end, as such, not only to the means which are conducive to it; and, that being so, right can no longer be defined as "conducive to the general happiness," without

involving the fallacy in question. For now it is obvious that the definition of right as conducive to general happiness can be used by him in support of the fundamental principle that general happiness is the right end; instead of being itself derived from that principle. If right, by definition, means conducive to general happiness, then it is obvious that general happiness is the right end. It is not necessary now first to prove or assert that general happiness is the right end, before right is defined as conducive to general happiness—a perfectly valid procedure; but on the contrary the definition of right as conducive to general happiness proves general happiness to be the right end—a perfectly invalid procedure, since in this case the statement that “general happiness is the right end of human action” is not an ethical principle at all, but either, as we have seen, a proposition about the meaning of words, or else a proposition about the *nature* of general happiness, not about its rightness or goodness.

Now, I do not wish the importance I assign to this fallacy to be misunderstood. The discovery of it does not at all refute Bentham’s contention that greatest happiness is the proper end of human action, if that be understood as an ethical proposition, as he undoubtedly intended it. That principle may be true all the same; we shall consider whether it is so in succeeding chapters. Bentham might have maintained it, as Professor Sidgwick does, even if the fallacy had been pointed out to him. What I am maintaining is that the *reasons* which he actually gives for his ethical proposition are fallacious ones, so far as they consist in a definition of right. What I suggest is that he did not perceive them to be fallacious; that, if he had done so, he would have been led to seek for other reasons in support of his Utilitarianism; and that, had he sought for other reasons, he *might* have found none which he thought to be sufficient. In that case he would have changed his whole system—a most important consequence. It is undoubtedly also possible that he would have thought other reasons to be sufficient, and in that case his ethical system, in its main results, would still have stood. But even in this latter case, his use of the fallacy would be a serious objection to him as an ethical philosopher. For it is the business of Ethics, I must insist, not only to obtain true results, but also to find valid reasons for them. The direct object of Ethics is knowledge and not practice; and any one who uses the naturalistic fallacy has certainly not fulfilled this first object, however correct his practical principles may be.

My objections to Naturalism are then, in the first place, that it offers no reason at all, far less any valid reason, for any ethical principle whatever; and in this it already fails to satisfy the requirements of Ethics, as a scientific study. But in the second place I contend that, though it gives a reason for no ethical principle, it is a *cause* of the acceptance of false principles—it deludes the mind into accepting ethical principles, which are false; and in this it is contrary to every aim of Ethics. It is easy to see that if we start with a definition of right conduct as conduct conducive to general happiness; then, know-

ing that right conduct is universally conduct conducive to the good, we very easily arrive at the result that the good is general happiness. If, on the other hand, we once recognise that we must start our Ethics without a definition, we shall be much more apt to look about us, before we adopt any ethical principle whatever; and the more we look about us, the less likely we are to adopt a false one. It may be replied to this: Yes, but we shall look about us just as much, before we settle on our definition, and are therefore just as likely to be right. But I will try to shew that this is not the case. If we start with the conviction that a definition of good can be found, we start with the conviction that good *can mean* nothing else than some one property of things; and our only business will then be to discover what that property is. But if we recognise that, so far as the meaning of good goes, anything whatever may be good, we start with a much more open mind. Moreover, apart from the fact that, when we think we have a definition, we cannot logically defend our ethical principles in any way whatever, we shall also be much less apt to defend them well, even if illogically. For we shall start with the conviction that good must mean so and so, and shall therefore be inclined either to misunderstand our opponent's arguments or to cut them short with the reply, "This is not an open question: the very meaning of the word decides it; no one can think otherwise except through confusion."

15. Our first conclusion as to the subject-matter of Ethics is, then, that there is a simple, indefinable, unanalysable object of thought by reference to which it must be defined. By what name we call this unique object is a matter of indifference, so long as we clearly recognise what it is and that it does differ from other objects. The words which are commonly taken as the signs of ethical judgments all do refer to it; and they are expressions of ethical judgments solely because they do so refer. But they may refer to it in two different ways, which it is very important to distinguish, if we are to have a complete definition of the range of ethical judgments. Before I proceed to argue that there was such an indefinable notion involved in ethical notions, I stated (§ 4) that it was necessary for Ethics to enumerate all true universal judgments, asserting that such and such a thing was good, whenever it occurred. But, although all such judgments do refer to that unique notion which I have called "good," they do not all refer to it in the same way. They may either assert that this unique property does always attach to the thing in question, or else they may assert only that the thing in question is *a cause or necessary condition* for the existence of other things to which this unique property does attach. The nature of these two species of universal ethical judgments is extremely different; and a great part of the difficulties, which are met with in ordinary ethical speculations are due to the failure to distinguish them clearly. Their difference has, indeed, received expression in ordinary language by the contrast between the terms "good" as means and "good in itself," "value as a means" and "intrinsic value." But these terms are apt to be applied correctly only in the more ob-

vicious instances and this seems to be due to the fact that the distinction between the conceptions which they denote has not been made a separate object of investigation. This distinction may be briefly pointed out as follows.

16. Whenever we judge that a thing is "good as a means," we are making a judgment with regard to its causal relations: we judge *both* that it will have a particular kind of effect, *and* that that effect will be good in itself. But to find causal judgments that are universally true is notoriously a matter of extreme difficulty. The late date at which most of the physical sciences became exact, and the comparative fewness of the laws which they have succeeded in establishing even now, are sufficient proofs of this difficulty. With regard, then, to what are the most frequent objects of ethical judgments, namely actions, it is obvious that we cannot be satisfied that any of our universal causal judgments are true, even in the sense in which scientific laws are so. We cannot even discover hypothetical laws of the form "Exactly this action will always, under these conditions, produce exactly that effect." But for a correct ethical judgment with regard to the effects of certain actions we require more than this in two respects. (1) We require to know that a given action will produce a certain effect *under whatever circumstances it occurs*. But this is certainly impossible. It is certain that in different circumstances the same action may produce effects which are utterly different in all respects upon which the value of the effect depends. Hence we can never be entitled to more than a *generalisation*—to a proposition of the form "This result *generally* follows this kind of action"; and even this generalisation will only be true, if the circumstances under which the action occurs are generally the same. This is in fact the case, to a great extent, within any one particular age and state of society. But, when we take other ages into account, in many most important cases the normal circumstances of a given kind of action will be so different, that the generalisation which is true for one will not be true for another. With regard then to ethical judgments which assert that a certain kind of action is good as a means to a certain kind of effect, none will be *universally* true; and many, though *generally* true at one period, will be generally false at others. But (2) we require to know not only that *one* good effect will be produced, but that, among all subsequent events affected by the action in question, the balance of good will be greater than if any other possible action had been performed. In other words, to judge that an action is generally a means to good is to judge not only that it generally does *some* good, but that it generally does the greatest good of which the circumstances admit. In this respect ethical judgments about the effects of action involve a difficulty and a complication far greater than that involved in the establishment of scientific laws. For the latter we need only consider a single effect; for the former it is essential to consider not only this, but the effects of that effect, and so on as far as our view into the future can reach. It is, indeed, obvious that our view can never reach far enough for us to be certain that any action will produce the best possible

effects. We must be content, if the greatest possible balance of good seems to be produced within a limited period. But it is important to notice that the whole series of effects within a period of considerable length is actually taken account of in our common judgments that an action is good as a means; and that hence this additional complication, which makes ethical generalisations so far more difficult to establish than scientific laws, is one which is involved in actual ethical discussions, and is of practical importance. The commonest rules of conduct involve such considerations as the balancing of future bad health against immediate gains; and even if we can never settle with any certainty how we shall secure the greatest possible total of good, we try at least to assure ourselves that probable future evils will not be greater than the immediate good.

17. There are, then judgments which state that certain kinds of things have good effects; and such judgments, for the reasons just given, have the important characteristics (1) that they are unlikely to be true, if they state the kind of thing in question *always* has good effects, and (2) that, even if they only state that it generally has good effects, many of them will only be true of certain periods in the world's history. On the other hand there are judgments which state that certain kinds of things are themselves good; and these differ from the last in that, if true at all, they are all of them universally true. It is, therefore, extremely important to distinguish these two kinds of possible judgments. Both may be expressed in the same language: in both cases we commonly say "Such and such a thing is good." But in the one case "good" will mean "good as means," i.e., merely that the thing is a means to good—will have good effects: in the other case it will mean "good as end"—we shall be judging that the thing itself has the property which, in the first case, we asserted only to belong to its effects. It is plain that these are very different assertions to make about a thing; it is plain that either or both of them may be made, both truly and falsely, about all manner of things; and it is certain that unless we are clear as to which of the two we mean to assert, we shall have a very poor chance of deciding rightly whether our assertion is true or false. It is precisely this clearness as to the meaning of the question asked which has hitherto been almost entirely lacking in ethical speculation. Ethics has always been predominantly concerned with the investigation of a limited class of actions. With regard to these we may ask *both* how far they are good in themselves *and* how far they have a general tendency to produce good results. And the arguments brought forward in ethical discussion have always been of both classes—both such as would prove the conduct in question to be good in itself and such as would prove it to be good as a means. But that these are the only questions which any ethical discussion can have to settle, and that to settle the one is *not* the same thing as to settle the other—these two fundamental facts have in general escaped the notice of ethical philosophers. Ethical questions are commonly asked in an ambiguous form. It is asked "What is a

man's duty under these circumstances?" or "Is it right to act in this way?" or "What ought we to aim at securing?" But all these questions are capable of further analysis; a correct answer to any of them involves both judgments of what is good in itself and causal judgments. This is implied even by those who maintain that we have a direct and immediate judgment of absolute rights and duties. Such a judgment can only mean that the course of action in question is *the* best thing to do; that, by acting so, every good that *can* be secured will have been secured. Now we are not concerned with the question whether such a judgment will ever be true. The question is: What does it imply, if it is true? And the only possible answer is that, whether true or false, it implies both a proposition as to the degree of goodness of the action in question, as compared with other things, and a number of causal propositions. For it cannot be denied that the action will have consequences: and to deny that the consequences matter is to make a judgment of their intrinsic value, as compared with the action itself. In asserting that the action is *the* best thing to do, we assert that it together with its consequences presents a greater sum of intrinsic value than any possible alternative. And this condition may be realised by any of the three cases: (a) If the action itself has greater intrinsic value than any alternative, whereas both its consequences and those of the alternatives are absolutely devoid either of intrinsic merit or intrinsic demerit; or (b) if, though its consequences are intrinsically bad, the balance of intrinsic value is greater than would be produced by any alternative; or (c) if, its consequences being intrinsically good, the degree of value belonging to them and it conjointly is greater than that of any alternative series. In short, to assert that a certain line of conduct is at a given time, absolutely right or obligatory, is obviously to assert that more good or less evil will exist in the world, if it be adopted, than if anything else be done instead. But this implies a judgment as to the value both of its own consequences and of those of any possible alternative. And that an action will have such and such consequences involves a number of causal judgments.

Similarly, in answering the question "What ought we to aim at securing?" causal judgments are again involved, but in a somewhat different way. We are liable to forget because it is so obvious, that this question can never be answered correctly except by naming something which *can* be secured. Not everything can be secured; and, even if we judge that nothing which cannot be obtained would be of equal value with that which can, the possibility of the latter, as well as its value, is essential to its being a proper end of action. Accordingly neither our judgments as to what actions we ought to perform, nor even our judgments as to the ends which they ought to produce, are pure judgments of intrinsic value. With regard to the former, an action which is absolutely obligatory *may* have no intrinsic value whatsoever; that it is perfectly virtuous may mean merely that it causes the best possible effects. And with regard to the latter, these best possible

results which justify our action can, in any case, have only so much of intrinsic value as the laws of nature allow us to secure; and they in their turn *may* have no intrinsic value whatsoever, but may merely be a means to the attainment (in a still further future) of something that has such value. Whenever, therefore, we ask "What ought we to do?" or "What ought we try to get?" we are asking questions which involve a correct answer to two others, completely different in kind from one another. We must know *both* what degree of intrinsic value different things have, *and* how these different things may be obtained. But the vast majority of questions which have actually been discussed in Ethics—all practical questions, indeed—involve this double knowledge; and they have been discussed without any clear separation of the two distinct questions involved. A great part of the vast disagreements prevalent in Ethics is to be attributed to this failure in analysis. By the use of conceptions which involve both that of intrinsic value and that of causal relation, as if they involved intrinsic value only, two different errors have been rendered almost universal. Either it is assumed that nothing has intrinsic value which is not possible, or else it is assumed that what is necessary must have intrinsic value. Hence the primary and peculiar business of Ethics, the determination what things have intrinsic value and in what degrees, has received no adequate treatment at all. And on the other hand a *thorough* discussion of means has been also largely neglected, owing to an obscure perception of the truth that it is perfectly irrelevant to the question of intrinsic values. But however this may be, and however strongly any particular reader may be convinced that some one of the mutually contradictory systems which hold the field has given a correct answer either to the question what has intrinsic value, or to the question what we ought to do, or to both, it must at least be admitted that the questions what is best in itself and what will bring about the best possible, are utterly distinct; that both belong to the actual subject-matter of Ethics; and that the more clearly distinct questions are distinguished, the better is our chance of answering both correctly.

18. There remains one point which must not be omitted in a complete description of the kind of questions which Ethics has to answer. The main division of those questions is, as I have said, into two; the question what things are good in themselves, and the question to what other things these are related as effects. The first of these, which is the primary ethical question and is presupposed by the other, includes a correct comparison of the various things which have intrinsic value (if there are many such) in respect of the degree of value which they have; and such comparison involves a difficulty of principle which has greatly aided the confusion of intrinsic value with mere "goodness as a means." It has been pointed out that one difference between a judgment, which asserts that a thing is good in itself, and a judgment which asserts that it is a means to good, consists in the fact that the first, if true of one instance of the thing in question, is necessarily

true of all; whereas a thing which has good effects under some circumstances may have bad ones under others. Now it is certainly true that all judgments of intrinsic value are in this sense universal; but the principle which I have now to enunciate may easily make it appear as if they were not so but resembled the judgment of means in being merely general. There is, as will presently be maintained, a vast number of different things, each of which has intrinsic value; there are also very many which are positively bad; and there is a still larger class of things, which appear to be indifferent. But a thing belonging to any of these three classes may occur as part of a whole, which includes among its other parts other things belonging both to the same and to the other two classes; and these wholes, as such, may also have intrinsic value. The paradox, to which it is necessary to call attention, is that *the value of such a whole bears no regular proportion to the sum of the value of its parts*. It is certain that a good thing may exist in such a relation to another good thing that the value of the whole thus formed is immensely greater than the sum of the values of the two good things. It is certain that a whole formed of a good thing and an indifferent thing may have immensely greater value than that good thing itself possesses. It is certain that two bad things or a bad thing and an indifferent thing may form a whole much worse than the sum of badness of its parts. And it seems as if indifferent things may also be the sole constituents of a whole which has great value either positive or negative. Whether the addition of a bad thing to a good whole may increase the positive value of the whole, or the addition of a bad thing to a bad may produce a whole having positive value, may seem more doubtful; but it is, at least, possible, and this possibility must be taken into account in our ethical investigations. However, we may decide particular questions, the principle is clear. *The value of a whole must not be assumed to be the same as the sum of the values of its parts*.

A single instance will suffice to illustrate the kind of relation in question. It seems to be true that to be conscious of a beautiful object is a thing of great intrinsic value; whereas the same object, if no one be conscious of it, has certainly comparatively little value, and is commonly held to have none at all. But the consciousness of a beautiful object is certainly a whole of some sort in which we can distinguish as parts the object on the one hand and the being conscious on the other. Now this latter factor occurs as part of a different whole, whenever we are conscious of any thing; and it would seem that some of these wholes have at all events very little value, and may even be indifferent or positively bad. Yet we cannot always attribute the slightness of their value to any positive demerit in the object which differentiates them from the consciousness of beauty; the object itself may approach as near as possible to absolute neutrality. Since, therefore, mere consciousness does not always confer great value upon the whole of which it forms a part, even though its object may have no great demerit, we cannot attribute the great superiority of the consciousness of a beautiful thing

over the beautiful thing itself to the mere addition of the value of consciousness to that of the beautiful thing. Whatever the intrinsic value of consciousness may be, it does not give to the whole of which it forms a part a value proportioned to the sum of its value and that of its object. If this be so, we have here an instance of a whole possessing a different intrinsic value from the sum of that of its parts; and whether it be so or not, what is meant by such a difference is illustrated by this case.

19. There are, then, wholes which possess the property that their value is different from the sum of the values of their parts; and the relations which subsist between such parts and the whole of which they form a part have not hitherto been distinctly recognised or received a separate name. Two points are especially worthy of notice. (1) It is plain that the existence of any such part is a necessary condition for the existence of that good which is constituted by the whole. And exactly the same language will also express the relation between a means and the good thing which is its effect. But yet there is a most important difference between the two cases, constituted by the fact that the part is, whereas the means is not, a part of the good thing for the existence of which its existence is a necessary condition. The necessity by which, if the good in question is to exist, the means to it must exist is merely a natural or causal necessity. If the laws of nature were different, exactly the same good might exist, although what is now a necessary condition of its existence did not exist. The existence of the means has no intrinsic value; and its utter annihilation would leave the value of that which it is now necessary to secure entirely unchanged. But in the case of a part of such a whole as we are now considering, it is otherwise. In this case the good in question cannot conceivably exist, unless the part exist too. The necessity which connects the two is quite independent of natural law. What is asserted to have intrinsic value is the existence of the whole and the existence of the whole includes the existence of its part. Suppose the part removed, and what remains is not what *was* asserted to have intrinsic value; but if we suppose a means removed, what remains is just what *was* asserted to have intrinsic value. And yet (2) the existence of the part may *itself* have no more intrinsic value than that of the means. It is this fact which constitutes the paradox of the relation which we are discussing. It has just been said that what has intrinsic value is the existence of the whole, and that this includes the existence of the part; and from this it would seem natural inference that the existence of the part has intrinsic value. But the inference would be as false as if we were to conclude that, because the number of two stones was two, each of the stones was also two. The part of a valuable whole retains exactly the same value when it is, as when it is not, a part of that whole. If it had value under other circumstances, its value is not any greater, when it is part of a far more valuable whole; and if it had no value by itself, it has none still, however great be that of the whole of which it now forms a part. We are not then

justified in asserting that one and the same thing is under some circumstances intrinsically good, and under others not so; as we are justified in asserting of a means that it sometimes does and sometimes does not produce good results. And yet we are justified in asserting that it is far more desirable that a certain thing should exist under some circumstances than under others; namely when other things will exist in such relations to it as to form a more valuable whole. *It* will not have more intrinsic value under these circumstances than under others; *it* will not necessarily even be a means to the existence of things having more intrinsic value: but it will, like a means, be a necessary condition for the existence of that which *has* greater intrinsic value, although, unlike a means, it will itself form a part of this more valuable existent.

20. I have said that the peculiar relation between part and whole which I have just been trying to define is one which has received no separate name. It would, however, be useful that it should have one; and there is a name, which might well be appropriated to it, if only it could be divorced from its present unfortunate usage. Philosophers, especially those who profess to have derived great benefit from the writings of Hegel, have latterly made much use of the terms "organic whole," "organic unity," "organic relation." The reason why these terms might well be appropriated to the use suggested is that the peculiar relation of parts to whole, just defined, is one of the properties which distinguishes the wholes to which they are actually applied with the greatest frequency. And the reason why it is desirable that they should be divorced from their present usage is that, as at present used, they have no distinct sense and, on the contrary, both imply and propagate errors of confusion.

To say that a thing is an "organic whole" is generally understood to imply that its parts are related to one another and to itself as means to end; it is also understood to imply that they have a property described in some such phrase as that they have "no meaning or significance apart from the whole"; and finally such a whole is also treated as if it had the property to which I am proposing that the name should be confined. But those who use the term give us, in general, no hint as to how they suppose these three properties to be related to one another. It seems generally to be assumed that they are identical; and always, at least, that they are necessarily connected with one another. That they are not identical I have already tried to shew; to suppose them so is to neglect the very distinctions pointed out in the last paragraph; and the usage might well be discontinued merely because it encourages such neglect. But a still more cogent reason for its discontinuance is that, so far from being necessarily connected, the second is a property which can attach to nothing, being a self-contradictory conception; whereas the first, if we insist on its most important sense, applies to many cases, to which we have no reason to think that the third applies also, and the third certainly applies to many to which the first does not apply.

21. These relations between the three properties just distinguished may be illustrated by reference to a whole of the kind from which the name "organic" was derived—a whole which is an organism in the scientific sense—namely the human body.

(1) There exists between many parts of our body (though not between all) a relation which has been familiarised by the fable, attributed to Menenius Agrippa, concerning the belly and its members. We can find in it parts such that the continued existence of the one is a necessary condition for the continued existence of the other; while the continued existence of this latter is also a necessary condition for the continued existence of the former. This amounts to no more than saying that in the body we have instances of two things, both enduring for some time, which have a relation of mutual causal dependence on one another—a relation of "reciprocity." Frequently no more than this is meant by saying that the parts of the body form an "organic unity," or that they are mutually means and ends to one another. And we certainly have here a striking characteristic of living things. But it would be extremely rash to assert that this relation of mutual causal dependence was only exhibited by living things and hence was sufficient to define their peculiarity. And it is obvious that of two things which have this relation of mutual dependence, neither may have intrinsic value, or one may have it and the other lack it. They are not necessarily "ends" to one another in any sense except that in which "end" means "effect." And moreover it is plain that in this sense the whole cannot be an end to any of its parts. We are apt to talk of "the whole" in contrast to one of its parts, when in fact we mean only the rest of the parts. But strictly the whole must include all its parts and no part can be a cause of the whole, because it cannot be a cause of itself. It is plain, therefore, that this relation of mutual causal dependence implies nothing with regard to the value of either of the objects which have it; and that, even if both of them happen also to have value, this relation between them is one which cannot hold between part and whole.

But (2) it may also be the case that our body as a whole has a value greater than the sum of values of its parts; and this may be what is meant when it is said that the parts are means to the whole. It is obvious that if we ask the question "Why *should* the parts be such as they are?" a proper answer may be "Because the whole they form has so much value." But it is equally obvious that the relation which we thus assert to exist between part and whole is quite different from that which we assert between part and part when we say "This part exists, because that one could not exist without it." In the latter case we assert the two parts to be causally connected; but, in the former, part and whole cannot be causally connected, and the relation which we assert to exist between them may exist even though the parts are not causally connected either. All the parts of a picture do not have that relation of mutual causal dependence, which certain parts of the body have, and yet the existence of those which do not have it may be absolutely es-

sential to the value of the whole. The two relations are quite distinct in kind, and we cannot infer the existence of the one from that of the other. It can, therefore, serve no useful purpose to include them both under the same name; and if we are to say that a whole is organic because its parts are (in this sense) "means" to the whole, we must *not* say that it is organic because its parts are causally dependent on one another.

22. But finally (3) the sense which has been most prominent in recent uses of the term "organic whole" is one whereby it asserts the parts of such a whole to have a property which the parts of no whole can possibly have. It is supposed that just as the whole would not be what it is but for the existence of the parts, so the parts, would not be what they are but for the existence of the whole, and this is understood to mean not merely that any particular part could not exist unless the others existed too (which is the case where relation [1] exists between the parts), but actually that the part is no distinct object of thought—that the whole, of which it is a part, is in its turn a part of it. That this supposition is self-contradictory a very little reflection should be sufficient to shew. We may admit, indeed, that when a particular thing is a part of a whole, it does possess a predicate which it would not otherwise possess—namely that it is a part of that whole. But what cannot be admitted is that this predicate alters the nature or enters into the definition of the thing which has it. When we think of the part *itself*, we mean just *that which* we assert, in this case, to *have* the predicate that it is part of the whole; and the mere assertion that *it* is a part of the whole involves that it should itself be distinct from that which we assert of it. Otherwise we contradict ourselves since we assert that, not *it*, but something else—namely it together with that which we assert of it—has the predicate which we assert of it. In short, it is obvious that no part contains analytically the whole to which it belongs, or any other parts of that whole. The relation of part to whole is *not* the same as that of whole to part; and the very definition of the latter is that it does contain analytically that which is said to be its part. And yet this very self-contradictory doctrine is the chief mark which shews the influence of Hegel upon modern philosophy—an influence which pervades almost the whole of orthodox philosophy. This is what is generally implied by the cry against falsification by abstraction: that a whole is always a part of its part! "If you want to know the truth about a part," we are told, "you must remember *not* that part, but something else—namely the whole: *nothing* is true of the part, but only of the whole." Yet plainly it must be true of the part at least that it is a part of the whole; and it is obvious that when we say it is, we do not mean merely that the whole is a part of itself. This doctrine, therefore, that a part can have "no meaning or significance apart from its whole" must be utterly rejected. It implies itself that the statement "This is a part of that whole" has a meaning; and in order that this may have one, both subject and predicate must have a distinct meaning. And it is easy to see how this

false doctrine has arisen by confusion with the two relations (1) and (2) which may really be properties of wholes.

(1) The existence of a part may be connected by a natural or causal necessity with the existence of the other parts of its whole; and further what is a part of a whole and what has ceased to be such a part, although differing intrinsically from one another may be called by one and the same name. Thus, to take a typical example, if an arm be cut off from the human body, we still call it an arm. Yet an arm, when it is a part of the body, undoubtedly differs from a dead arm: and hence we may easily be led to say "The arm which is a part of the body would not be what it is, if it were not such a part," and to think that the contradiction thus expressed is in reality a characteristic of things. But, in fact, the dead arm never was a part of the body; it is only *partially* identical with the living arm. Those parts of it which are identical with parts of the living arm are exactly the same, whether they belong to the body or not; and in them we have an undeniable instance of one and the same thing at one time forming a part, and at another forming a part of the presumed "organic whole." On the other hand those properties which *are* possessed by the living, and *not* by the dead, arm, do not exist in a changed form in the latter: they simply do not exist there *at all*. By a causal necessity their existence depends on their having that relation to the other parts of the body which we express by saying that they form part of it. Yet, most certainly, *if* they ever did not form part of the body, they would be exactly what they are when they do. That they differ intrinsically from the properties of the dead arm and that they form part of the body are propositions not analytically related to one another. There is no contradiction in supposing them to retain such intrinsic differences and yet not to form part of the body.

But (b) when we are told that a living arm has no *meaning* or *significance* apart from the body to which it belongs, a different fallacy is also suggested. "To have meaning or significance" is commonly used in the sense of "to have importance"; and this again means "to have value either as a means or as an end." Now it is quite possible that even a living arm, apart from its body, would have no intrinsic value whatever; although the whole of which it is a part has great intrinsic value owing to its presence. Thus we may easily come to say that, *as* a part of the body, it has great value, whereas *by itself* it would have none; and thus that its whole "meaning" lies in its relation to the body. But in fact the value in question obviously does not belong to *it* at all. To have value merely as a part is equivalent to having no value at all, but merely being a part of that which has it. Owing, however, to neglect of this distinction, the assertion that a part has value, *as a part*, which it would not otherwise have, easily leads to the assumption that it is also different, as a part, from what it would otherwise be; for it is, in fact, true that two things which have a different value must also differ in other respects. Hence the assumption that one and the

same thing, because it is a part of a more valuable whole at one time than at another, therefore has more intrinsic value at one time than at another, has encouraged the self-contradictory belief that one and the same thing may be two different things, and that only in one of its forms is it truly what it is.

For these reasons, I shall, where it seems convenient, take the liberty to use the term "organic" with a special sense. I shall use it to denote the fact that a whole has an intrinsic value different in amount from the sum of the values of its parts. I shall use it to denote this and only this. The term will not imply any causal relation whatever between the parts of the whole in question. And it will not imply either, that the parts are inconceivable except as parts of that whole, or that, when they form parts of such a whole, they have a value different from that which they would have if they did not. Understood in this special and perfectly definite sense the relation of an organic whole to its parts is one of the most important which Ethics has to recognise. A chief part of that science should be occupied in comparing the relative values of various goods; and the grossest errors will be committed in such comparison if it be assumed that wherever two things form a whole, the value of that whole is merely the sum of the values of those two things. With this question of "organic wholes," then, we complete the enumeration of the kind of problems, with which it is the business of Ethics to deal.

23. In this chapter I have endeavoured to enforce the following conclusions. (1) The peculiarity of Ethics is not that it investigates assertions about human conduct but that it investigates assertions about that property of things which is denoted by the term "good," and the converse property denoted by the term "bad." It must, in order to establish its conclusions, investigate the truth of *all* such assertions, *except* those which assert the relation of this property only to a single existent (1-4). (2) This property, by reference to which the subject-matter of Ethics must be defined, is itself simple and indefinable (5-14). And (3) all assertions about its relation to other things are of two, and only two, kinds: they either assert in what degree things themselves possess this property, or else they assert causal relations between other things and those which possess it (15-17). Finally, (4) in considering the different degrees in which things themselves possess this property, we have to take account of the fact that a whole may possess it in a degree different from that which is obtained by summing the degrees in which its parts possess it (18-22).

A Defence of Common Sense

by G. E. MOORE

In what follows I have merely tried to state, one by one, some of the most important points in which my philosophical position differs from positions which have been taken up by *some* other philosophers. It may be that the points which I have had room to mention are not really the most important, and possibly some of them may be points as to which no philosopher has ever really differed from me. But, to the best of my belief, each is a point as to which many have really differed; although (in most cases, at all events) each is also a point as to which many have agreed with me.

I. The first point is a point which embraces a great many other points. And it is one which I cannot state as clearly as I wish to state it, except at some length. The method I am going to use for stating it is this. I am going to begin by enunciating, under the heading (1), a whole long list of propositions, which may seem, at first sight, such obvious truisms as not to be worth stating: they are, in fact, a set of propositions, every one of which (in my opinion) I *know*, with certainty, to be true. I shall, next, under the heading (2), state a single proposition which makes an assertion about a whole set of *classes* of propositions—each class being defined, as the class consisting of all propositions which resemble *one* of the propositions in (1) in a certain respect. (2), therefore, is a proposition which could not be stated, until the list of propositions in (1), or some similar list, had already been given. (2) is itself a proposition which may seem such an obvious truism as not to be worth stating: and it is also a proposition which (in my own opinion) I *know*, with certainty, to be true. But, nevertheless, it is, to the best of my belief, a proposition with regard to which many philosophers have, for different reasons, differed from me; even if they have not directly denied (2) itself, they have held views incompatible with it. My first point, then, may be said to be that (2), together with all its implications, some of which I shall expressly mention, is true.

(1) I begin, then, with my list of truisms, every one of which (in my own opinion) I *know*, with certainty, to be true. The propositions to be included in this list are the following:

There exists at present a living human body, which is *my* body. This

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body was born at a certain time in the past, and has existed continuously ever since, though not without undergoing changes; it was, for instance, much smaller when it was born, and for some time afterwards, than it is now. Ever since it was born, it has been either in contact with or not far from the surface of the earth; and, at every moment since it was born, there have also existed many other things, having shape and size in three dimensions (in the same familiar sense in which it has), from which it has been *at various distances* (in the familiar sense in which it is now at a distance both from that mantel-piece and from that book-case, and at a greater distance from the book-case than it is from the mantel-piece); also there have (very often, at all events) existed some other things of this kind with which it was *in contact* (in the familiar sense in which it is now in contact with the pen I am holding in my right hand and with some of the clothes I am wearing). Among the things which have, in this sense, formed part of its environment (i.e., have been either in contact with it, or at *some* distance from it, however *great*) there have, at every moment since its birth, been large numbers of other living human bodies, each of which has, like it, (a) at some time been born, (b) continued to exist for some time after birth, (c) been, at every moment of its life after birth, either in contact with or not far from the surface of the earth; and many of these bodies have already died and ceased to exist. But the earth has existed also for many years before my body was born; and for many of these years, also, large numbers of human bodies had, at every moment, been alive upon it; and many of these bodies had died and ceased to exist before it was born. Finally (to come to a different class of propositions), I am a human being, and I have, at different times since my body was born, had many different experiences, of each of many different kinds: e.g., I have often perceived both my own body and other things which formed part of its environment, including other human bodies; I have not only perceived things of this kind, but have also observed facts about them, such as, for instance, the fact which I am now observing, that that mantel-piece is at present nearer to my body than that book-case; I have been aware of other facts, which I was not at the time observing, such as, for instance, the fact, of which I am now aware, that my body existed yesterday and was then also for some time nearer to that mantel-piece than to that book-case; I have had expectations with regard to the future, and many beliefs of other kinds, both true and false; I have thought of imaginary things, and persons and incidents, in the reality of which I did not believe; I have had dreams; and I have had feelings of many different kinds. And, just as my body has been the body of a human being, namely myself, who has, during its life-time, had many experiences of each of these (and other) different kinds; so, in the case of very many of the other human bodies which have lived upon the earth, each has been the body of a different human being, who has, during the life-time of that

body, had many different experiences of each of these (and other) different kinds.

(2) I now come to the single truism which, as will be seen, could not be stated except by reference to the whole list of truisms, just given in (1). This truism also (in my opinion) I *know*, with certainty, to be true; and it is as follows:

In the case of *very many* (I do not say *all*) of the human beings belonging to the class (which includes myself) defined in the following way, i.e., as human beings who have had human bodies, that were born and lived for some time upon the earth, and who have, during the life-time of those bodies, had many different experiences of each of the kinds mentioned in (1), it is true that each has frequently, during the life of his body, known, with regard to *himself* or *his* body, and with regard to some time earlier than any of the times at which I wrote down the propositions in (1), a proposition *corresponding* to each of the propositions in (1), in the sense that it asserts with regard to *himself* or *his* body and the earlier time in question (namely, in each case, the time at which he knew it), just what the corresponding proposition in (1) asserts with regard to *me* or *my* body and the time at which I wrote that proposition down.

In other words what (2) asserts is only (what seems an obvious enough truism) that each of *us* (meaning by "us," very many human beings of the class defined) has frequently *known*, with regard to *himself*, or *his* body and the time at which he knew it, everything which, in writing down my list of propositions in (1), I was claiming to know about *myself* or *my* body and the time at which I wrote that proposition down. I.e., just as *I* knew (when I wrote it down) "There exists at present a living human body which is my body," so each of *us* has frequently known with regard to himself and some other time the different but corresponding proposition, which *he* could *then* have properly expressed by, "There exists *at present* a human body which is *my* body"; just as *I* know "Many human bodies other than mine have before now lived on the earth," so each of *us* has frequently known the different but corresponding proposition "Many human bodies other than *mine* have before *now* lived on the earth"; just as *I* know "Many human beings other than myself have before now perceived, and dreamed, and felt," so each of *us* has frequently known the different but corresponding proposition "Many human beings other than *myself* have before *now* perceived, and dreamed, and felt"; and so on, in the case of *each* of the propositions enumerated in (1).

I hope there is no difficulty in understanding, so far, what this proposition (2) asserts. I have tried to make clear by examples what I mean by "propositions *corresponding* to each of the propositions in (1)." And what (2) asserts is merely that each of *us* has frequently known to be true a proposition *corresponding* (in that sense) to each of the propositions in (1)—a

different corresponding proposition, of course, at each of the times at which he knew such a proposition to be true.

But there remain two points, which, in view of the way in which some philosophers have used the English language, ought, I think, to be expressly mentioned, if I am to make quite clear exactly how much I am asserting in asserting (2).

The first point is this. Some philosophers seem to have thought it legitimate to use the word "true" in such a sense, that a proposition which is partially false may nevertheless also be true; and some of these, therefore, would perhaps say that propositions like those enumerated in (1) are, in their view, true, when all the time they believe that every such proposition is partially false. I wish, therefore, to make it quite plain that I am not using "true" in any such sense. I am using it in such a sense (and I think this is the ordinary usage) that if a proposition is partially false, it follows that it is *not* true, though, of course, it may be *partially* true. I am maintaining, in short, that all the propositions in (1), and also many propositions corresponding to each of these, are *wholly* true; I am asserting this in asserting (2). And hence any philosopher, who does in fact believe, with regard to any or all of these classes of propositions, that every proposition of the class in question is partially false, is, in fact, disagreeing with me and holding a view incompatible with (2), even though he may think himself justified in *saying* that he believes some propositions belonging to all of these classes to be "true."

And the second point is this. Some philosophers seem to have thought it legitimate to use such expressions as, e.g., "The earth has existed for many years past," as if they expressed something which they really believed, when in fact they believe that every proposition, which such an expression would *ordinarily* be understood to express, is, at least partially, false; and all they really believe is that there is some *other* set of propositions, related in a certain way to those which such expressions do actually express, which, unlike these, really are true. That is to say, they use the expression "The earth has existed for many years past" to express, not what it would ordinarily be understood to express, but the proposition that some proposition, related to this in a certain way, is true; when all the time they believe that the proposition, which this expression would ordinarily be understood to express, is, at least partially, false. I wish, therefore, to make it quite plain that I was not using the expressions I used in (1) in any such subtle sense. I meant by each of them precisely what every reader, in reading them, will have understood me to mean. And any philosopher, therefore, who holds that any of these expressions, if understood in this popular manner, expresses a proposition which embodies some popular error, is disagreeing with me and holding a view incompatible with (2), even though he may hold that there is some *other*, true, proposition which the expression in question might be legitimately used to express.

In what I have just said, I have assumed that there is some meaning which is *the* ordinary or popular meaning of such expressions as "The earth has existed for many years past." And this, I am afraid, is an assumption which some philosophers are capable of disputing. They seem to think that the question "Do you believe that the earth has existed for many years past?" is not a plain question, such as should be met either by a plain "Yes" or "No," or by a plain "I can't make up my mind," but is the sort of question which can be properly met by: "It all depends on what you mean by 'the earth' and 'exists' and 'years': if you mean so and so, and so and so, and so and so, then I do; but if you mean so and so, and so and so, and so and so, or so and so, and so and so, and so and so, or so and so, and so and so, then I don't, or at least I think it is extremely doubtful." It seems to me that such a view is as profoundly mistaken as any view can be. Such an expression as "The earth has existed for many years past" is the very type of an unambiguous expression, the meaning of which we all understand. Any one who takes a contrary view must, I suppose, be confusing the question whether we understand its meaning (which we all certainly do) with the entirely different question whether we *know what it means*, in the sense that we are able to *give a correct analysis* of its meaning. The question what is the correct analysis of *the* proposition meant *on any occasion* [for, of course, as I insisted in defining (2), a different proposition is meant at every different time at which the expression is used] by "The earth has existed for many years past" is, it seems to me, a profoundly difficult question, and one to which, as I shall presently urge, no one knows the answer. But to hold that we do not know what, in certain respects, is the analysis of what we understand by such an expression, is an entirely different thing from holding that we do not understand the expression. It is obvious that we cannot even raise the question how what we do understand by it is to be analysed, unless we do understand it. So soon, therefore, as we know that a person who uses such an expression, is using it in its ordinary sense, we understand his meaning. So that in explaining that I was using the expressions used in (1) in their ordinary sense (those of them which have an ordinary sense, which is not the case with quite all of them), I have done all that is required to make my meaning clear.

But now, assuming that the expressions which I have used to express (2) are understood, I think, as I have said, that many philosophers have really held views incompatible with (2). And the philosophers who have done so may, I think, be divided into two main groups. *A*. What (2) asserts is, with regard to a whole set of *classes* of propositions, that we have, each of us, frequently *known* to be true propositions belonging to *each* of these classes. And one way of holding a view incompatible with this proposition is, of course, to hold, with regard to one or more of the classes in question, that *no* propositions of that class are true—that all of them are, at least

partially, false; since if, in the case of any one of these classes, no propositions of that class *are* true, it is obvious that nobody can have *known* any propositions of that class to be true, and therefore that *we* cannot have known to be true propositions belonging to *each* of these classes. And my first group of philosophers consists of philosophers who have held views incompatible with (2) for this reason. They have held, with regard to one or more of the classes in question, simply that no propositions of that class *are* true. Some of them have held this with regard to *all* the classes in question; some only with regard to *some* of them. But, of course, whichever of these two views they have held, they have been holding a view inconsistent with (2). *B.* Some philosophers, on the other hand, have not ventured to assert, with regard to *any* of the classes in (2), that no propositions of that class *are* true, but what they have asserted is that, in the case of some of these classes, no human being has ever *known*, with certainty, that any propositions of the class in question are true. That is to say, they differ profoundly from philosophers of group *A*, in that they hold that propositions of *all* these classes *may* be true; but nevertheless they hold a view incompatible with (2) since they hold, with regard to some of these classes, that none of us has ever known a proposition of the class in question to be true.

A. I said that some philosophers, belonging to this group, have held that no propositions belonging to any of the classes in (2) are wholly true, while others have only held this with regard to *some* of the classes in (2). And I think the chief division of this kind has been the following. Some of the propositions in (1) [and, therefore, of course, all propositions belonging to the corresponding classes in (2)] are propositions which cannot be true, unless some *material things* have existed and have stood in *spatial relations* to one another; that is to say, they are propositions which, in a *certain sense*, imply *the reality of material things*, and *the reality of Space*. E.g., the proposition that my body has existed for many years past, and has, at every moment during that time been either in contact with or not far from the earth, is a proposition which implies both the *reality of material things* (provided you use "material things" in such a sense that to deny the reality of material things implies that no proposition which asserts that human bodies have existed, or that the earth has existed, is wholly true) and also the *reality of Space* [provided, again, that you use "Space" in such a sense that to deny the reality of Space implies that no proposition which asserts that anything has ever been in contact with or at a distance from another, in the familiar senses pointed out in (1), is wholly true]. But others among the propositions in (1) [and, therefore, propositions belonging to the corresponding classes in (2)], do not (at least obviously) imply either the reality of material things or the reality of Space: e.g., the propositions that I have often had dreams, and have had many different feelings at different times. It is true that propositions of this second class do

imply one thing which is also implied by all propositions of the first, namely that (*in a certain sense*) *Time is real*, and imply also one thing not implied by propositions of the first class, namely that (*in a certain sense*) *at least one Self is real*. But I think there are some philosophers, who, while denying that (in the senses in question) either material things or Space are real, have been willing to admit that Selves and Time are real, in the sense required. Other philosophers, on the other hand, have used the expression "Time is not real," to express some view that they held; and some, at least, of these have, I think, meant by this expression something which is incompatible with the truth of *any* of the propositions in (1)—they have meant, namely, that *every* proposition of the sort that is expressed by the use of "now" or "at present," e.g., "I am now both seeing and hearing" or "There exists at present a living human body," or by the use of a *past* tense, e.g., "I *have* had many experiences in the past," or "The earth *has* existed for many years," are, at least partially, false.

All the four expressions I have just introduced, namely "Material things are not real," "Space is not real," "Time is not real," "The Self is not real," are, I think, unlike the expressions I used in (1), really ambiguous. And it may be that, in the case of each of them, some philosopher has used the expression in question to express some view he held which was not incompatible with (2). With such philosophers, if there are any, I am not, of course, at present concerned. But it seems to me that the most natural and proper usage of each of these expressions is a usage in which it *does* express a view incompatible with (2); and, in the case of each of them, some philosophers have, I think, really used the expression in question to express such a view. All such philosophers have, therefore, been holding a view incompatible with (2).

All such views, whether incompatible with *all* of the propositions in (1), or only with *some* of them, seem to me to be quite certainly false; and I think the following points are specially deserving of notice with regard to them:

(a) If *any* of the classes of propositions in (2) is such that no proposition of that class is true, then no philosopher has ever existed, and therefore none can ever have held with regard to any such class, that no proposition belonging to it is true. In other words, the proposition that some propositions belonging to each of these classes are true is a proposition which has the peculiarity, that, if any philosopher has ever denied it, it follows from the fact that he has denied it, that he must have been wrong in denying it. For when I speak of "philosophers" I mean, of course (as we all do), exclusively philosophers who have been human beings, with human bodies that have lived upon the earth, and who have at different times had many different experiences. If, therefore, there have been any philosophers, there have been human beings of this class; and if there have been human beings of this class, all the rest of what is asserted in (1) is certainly true too. Any view, therefore, incompatible with the proposition that many

propositions corresponding to each of the propositions in (1) are true, can only be true, on the hypothesis that no philosopher has ever held any such view. It follows, therefore, that, in considering whether this proposition is true, I cannot consistently regard the fact that many philosophers, whom I respect, have, to the best of my belief, held views incompatible with it, as having any weight at all against it. Since, if I know that they have held such views, I am, *ipso facto*, knowing that they were mistaken; and, if I have no reason to believe that the proposition in question is true, I have still less reason to believe that they have held views incompatible with it; since I am more certain that they have existed and held *some* views, i.e., that the proposition in question is true, than that they have held any views incompatible with it.

(b) It is, of course, the case that all philosophers who have held such views have repeatedly, even in their philosophical works, expressed other views inconsistent with them: i.e., no philosopher has ever been able to hold such views consistently. One way in which they have betrayed this inconsistency, is by alluding to the existence of other philosophers. Another way is by alluding to the existence of the human race, and in particular by using "we" in the sense in which I have already constantly used it, in which any philosopher who asserts that "we" do so and so, e.g., that "we sometimes believe propositions that are not true," is asserting not only that he himself has done the thing in question, but that *very many other human beings, who have had bodies and lived upon the earth*, have done the same. The fact is, of course, that all philosophers have belonged to the class of human beings, which exists only if (2) be true: that is to say, to the class of human beings, who have frequently *known* propositions corresponding to each of the propositions in (1). In holding views incompatible with the proposition that propositions of all these classes are true, they have, therefore, been holding views inconsistent with propositions which they themselves *knew* to be true; and it was, therefore, only to be expected that they should sometimes betray their knowledge of such propositions. The strange thing is that philosophers should have been able to hold sincerely, as part of their philosophical creed, propositions inconsistent with what they themselves knew to be true; and yet, so far as I can make out, this has really frequently happened. My position, therefore, on this first point, differs from that of philosophers belonging to this group *A*, not in that I hold anything which they don't hold, but only in that I don't hold, as part of my philosophical creed, things which they do hold as part of theirs—that is to say propositions inconsistent with some which they and I both hold in common. But this difference seems to me to be an important one.

(c) Some of these philosophers have brought forward, in favour of their position, arguments designed to show, in the case of some or all of the propositions in (1), that no propositions of that type can possibly be wholly true, because every such proposition entails both of two incompatible

propositions. And I admit, of course, that if any of the propositions in (1) did entail both of two incompatible propositions it could not be true. But it seems to me I have an absolutely conclusive argument to show that none of them does entail both of two incompatible propositions. Namely this: All of the propositions in (1) are true; no true proposition entails both of two incompatible propositions; therefore, none of the propositions in (1) entails both of two incompatible propositions.

(d) Although, as I have urged, no philosopher who has held with regard to any of these types of proposition, that no propositions of that type are true, has failed to hold also other views inconsistent with his view in this respect, yet I do not think that the view, with regard to any or all of these types, that no proposition belonging to them is true, is *in itself* a self-contradictory view, i.e., entails both of two incompatible propositions. On the contrary, it seems to me quite clear that it *might* have been the case that Time was not real, material things not real, Space not real, selves not real. And in favour of my view that none of these things, which might have been the case, *is* in fact the case, I have, I think, no better argument than simply this—namely, that all the propositions in (1) are, in fact, true.

B. This view, which is usually considered a much more modest view than A, has, I think, the defect that, unlike A, it really is self-contradictory, i.e., entails both of two mutually incompatible propositions.

Most philosophers who have held this view, have held, I think, that though each of us knows propositions corresponding to *some* of the propositions in (1), namely to those which merely assert that I myself have had in the past experiences of certain kinds at many different times, yet none of us knows for certain any propositions either of the type (a) which assert the existence of *material things* or of the type (b) which assert the existence of *other selves*, beside myself, and that *they* also have had experiences. They admit that we do in fact *believe* propositions of both these types, and that they *may* be true: some would even say that we know them to be highly probable; but they deny that we ever know them, *for certain*, to be true. Some of them have spoken of such beliefs as “beliefs of Common Sense,” expressing thereby their conviction that beliefs of this kind are very commonly entertained by mankind: but they are convinced that these things are, in all cases, only *believed*, not known for certain; and some have expressed this by saying that they are matters of Faith, not of Knowledge.

Now the remarkable thing, which those who take this view have not, I think, in general duly appreciated, is that, in each case, the philosopher who takes it is making an assertion about “us”—that is to say, not merely about himself, but about *many other human beings as well*. When he says “No human being has ever *known* of the existence of other human beings,” he is saying: “There have been many other human beings beside myself, and none of them (including myself) has ever known of the existence of

other human beings." If he says: "*These* beliefs are beliefs of Common Sense, but they are not matters of *knowledge*," he is saying: "There have been many other human beings, beside myself, who have shared these beliefs, but neither I nor any of the rest has ever known them to be true." In other words, he asserts with confidence that these beliefs *are* beliefs of Common Sense, and seems often to fail to notice that, *if* they are, they must be true; since the proposition that they are beliefs of Common Sense, is one which logically entails propositions both of type (a) and of type (b); it logically entails the proposition that many human beings, beside the philosopher himself, have had human bodies, which lived upon the earth, and have had various experiences, including beliefs of this kind. This is why this position, as contrasted with positions of group *A*, seems to me to be self-contradictory. Its difference from *A* consists in the fact that it is making a proposition about *human knowledge* in general, and therefore is actually asserting the existence of many human beings, whereas philosophers of group *A* in stating their position are not doing this: they are only contradicting other things which they hold. It is true that a philosopher who says "There have existed many human beings beside myself, and none of us has ever known of the existence of any human beings beside himself," is only contradicting himself, if what he holds is "There have *certainly* existed many human beings beside myself" or, in other words, "I know that there have existed other human beings beside myself." But this, it seems to me, is what such philosophers have in fact been generally doing. They seem to me constantly to betray the fact that they regard the proposition that those beliefs *are* beliefs of Common Sense, or the proposition that they themselves are not the only members of the human race, as not merely true, but *certainly* true; and *certainly* true it cannot be, unless one member, at least, of the human race, namely themselves, has *known* the very things which that member is declaring that no human being has ever known.

Nevertheless, my position that I *know*, with certainty, to be true all of the propositions in (1), is certainly not a position, the denial of which entails both of two incompatible propositions. If I do *know* all these propositions to be true, then, I think, it is quite certain that other human beings also have known corresponding propositions: that is to say (2) also *is* true, and I know it to be true. But do I really *know* all the propositions in (1) to be true? Isn't it possible that I merely believe them? or know them to be highly probable? In answer to this question, I think I have nothing better to say than that it seems to me that I *do* know them, with certainty. It is, indeed, obvious that, in the case of most of them, I do not know them *directly*: that is to say, I only know them because, in the past, I have known to be true other propositions which were evidence for them. If, for instance, I do know that the earth had existed for many years before I was born, I certainly only know this because I have known other things in the past

which were evidence for it. And I certainly do not know exactly what the evidence was. Yet all this seems to me to be no good reason for doubting that I do know it. We are all, I think, in this strange position that we do *know* many things, with regard to which we *know* further that we must have had evidence for them, and yet we do not know *how* we know them, i.e., we do not know what the evidence was. If there is any "we" and if we know that there is, this must be so: for, that there is a "we," is one of the things in question. And that I do know that there is a "we," that is to say, that many other human beings, with human bodies, have lived upon the earth, it seems to me that I do know, for certain.

If this first point in my philosophical position, namely my belief in (2), is to be given any name, which has actually been used by philosophers in classifying the positions of other philosophers, it would have, I think, to be expressed by saying that I am one of those philosophers who have held that the "Common Sense view of the world" is, in certain fundamental features, *wholly* true. But it must be remembered that, according to me, *all* philosophers, without exception, have agreed with me in holding this: and that the real difference, which is commonly expressed in this way is only a difference between those philosophers, who have *also* held views inconsistent with these features in "the Common Sense view of the world," and those who have not.

The features in question [namely, propositions of any of the classes defined in defining (2)] are all of them features, which have this peculiar property—namely, that *if we know that they are features in the "Common Sense view of the world," it follows that they are true: it is* self-contradictory to maintain that *we* know them to be features in the Common Sense view, and that yet they are not true; since to say that *we* know this, is to say that they are true. And many of them also have the further peculiar property that, *if they are features in the Common Sense view of the world (whether "we" know this or not), it follows that they are true*, since to say that there is a "Common Sense view of the world," is to say that they are true. The phrases "Common Sense view of the world" or "Common Sense beliefs" (as used by philosophers) are, of course, extraordinarily vague; and, for all I know, there may be many propositions which may be properly called features in "the Common Sense view of the world" or "Common Sense beliefs," which are not true, and which deserve to be mentioned with the contempt with which some philosophers speak of "Common Sense beliefs." But to speak with contempt of those "Common Sense beliefs" which I have mentioned is quite certainly the height of absurdity. And there are, of course, enormous numbers of other features in "the Common Sense view of the world" which, if these are true, are quite certainly true too: e.g., that there have lived upon the surface of the earth not only human beings, but also many different species of plants and animals, etc., etc.

II. What seems to me the next in importance of the points in which my philosophical position differs from positions held by *some* other philosophers, is one which I will express in the following way. I hold, namely, that there is no good reason to suppose either (*A*) that *every* physical fact is *logically* dependent upon some mental fact or (*B*) that *every* physical fact is *causally* dependent upon some mental fact. In saying this, I am not, of course, saying that there *are* any physical facts which are wholly independent (i.e., both logically and causally) of mental facts: I do, in fact, believe that there are; but that is not what I am asserting. I am only asserting that there is *no good reason* to suppose the contrary; by which I mean, of course, that none of the human beings, who have had human bodies that lived upon the earth, have, during the life-time of their bodies, had any good reason to suppose the contrary. Many philosophers have, I think, not only believed either that *every* physical fact is *logically* dependent upon some mental fact ("physical fact" and "mental fact" being understood in the sense in which I am using these terms) or that *every* physical fact is *causally* dependent upon some mental fact, or both, but also that they themselves had good reason for these beliefs. In this respect, therefore, I differ from them.

In the case of the term "physical fact," I can only explain how I am using it by giving examples. I mean by "physical facts," facts *like* the following: "That mantel-piece is at present nearer to this body than that book-case is," "The earth has existed for many years past," "The moon has at every moment for many years been nearer to the earth than to the sun," "That mantel-piece is of a light colour." But, when I say "facts *like* these," I mean, of course, facts like them *in a certain respect*; and what this respect is, I cannot define. The term "physical fact" is, however, in common use; and I think that I am using it in its ordinary sense. Moreover, there is no need for a definition to make my point clear; since among the examples I have given, there are some with regard to which I hold that there is no reason to suppose *them* (i.e., these particular physical facts) either logically or causally dependent upon any mental fact.

"Mental fact," on the other hand, is a much more unusual expression, and I am using it in a specially limited sense, which, though I think it is a natural one, does need to be explained. There may be many other senses in which the term can be properly used. But I am only concerned with this one; and hence it is essential that I should explain what it is.

There may, possibly, I hold, be "mental facts" of three different kinds. It is only with regard to the first kind that I am sure that there are facts of that kind; but if there were any facts of either of the other two kinds, they would be "mental facts" in my limited sense, and therefore I must explain what is meant by the hypothesis that there are facts of those two kinds.

(a) My first kind is this. I am conscious now; and also I am seeing something now. These two facts are both of them mental facts of my first kind;

and my first kind consists exclusively of facts which resemble one or other of the two in a certain respect.

(α) The fact that I am conscious now is obviously, in a certain sense, a fact, with regard to a particular individual and a particular time, to the effect that that individual is conscious at that time. And every fact which resembles this one in that respect is to be included in my first kind of mental fact. Thus the fact that I was also conscious at many different times yesterday is not itself a fact of this kind: but it entails that there *are* (or, as we should commonly say, because the times in question are past times, "were") many other facts of this kind, namely each of the facts, which, at each of the times in question, I could have properly expressed by "I am conscious *now*." Any fact which is, in this sense, a fact with regard to an individual and a time (whether the individual be myself or another, and whether the time be past or present), to the effect that that individual *is* conscious at that time, is to be included in my first kind of mental fact: and I call such facts, facts of class (β).

(β) The second example I gave, namely the fact that I am seeing something now, is obviously related to the fact that I am conscious now in a peculiar manner. It not only *entails* the fact that I am conscious now (for from the fact that I am seeing something it follows that I am conscious: I *could* not have been seeing anything, unless I had been conscious, though I might quite well have been conscious without seeing anything) but it also is a fact, with regard to a specific way (or mode) of being conscious, to the effect that I am conscious in that way: in the same sense in which the proposition (with regard to any particular thing) "This is red" both entails the proposition (with regard to the same thing) "This is coloured," and is also a proposition, with regard to a *specific way* of being coloured, to the effect that that thing is coloured in that way. And any fact which is related in this peculiar manner to any fact of class (α), is also to be included in my first kind of mental fact, and is to be called a fact of class (β). Thus the fact that I am hearing now, is, like the fact that I am seeing now, a fact of class (β); and so is any fact, with regard to myself and a past time, which could at that time have been properly expressed by "I am dreaming now," "I am imagining now," "I am at present aware of the fact that . . ." etc., etc. In short, any fact, which is a fact with regard to a particular individual (myself or another), a particular time (past or present), and *any particular kind of experience*, to the effect that that individual is having at that time an experience of that particular kind, is a fact of class (β): and only such facts are facts of class (β).

My first kind of mental facts consists exclusively of facts of classes (α) and (β), and consists of *all* facts of either of these kinds.

(b) That there are many facts of classes (α) and (β) seems to me perfectly certain. But many philosophers seem to me to have held a certain view with regard to the *analysis* of facts of class (α), which is such that, if it

were true, there would be facts of another kind, which I should wish also to call "mental facts." I don't feel at all sure that this analysis is true; but it seems to me that it *may* be true; and since we can understand what is meant by the supposition that it is true, we can also understand what is meant by the supposition that there are "mental facts" of this second kind.

Many philosophers have, I think, held the following view as to the analysis of what each of us knows, when he knows at any time "I am conscious now." They have held, namely, that there is a certain intrinsic property (with which we are all of us familiar and which might be called that of "being an experience") which is such that, at any time at which any man knows "I am conscious now," he is knowing, with regard to that property and himself and the time in question, "There is occurring now an event which has this property (i.e., "is an experience") and which is an experience of *mine*," and such that this fact is what he expresses by "I am conscious now." And if this view is true, there must be many facts of each of three kinds, each of which I should wish to call "mental facts"; viz. (1) facts with regard to some event, which has this supposed intrinsic property, and to some time, to the effect that that event is occurring at that time, (2) facts with regard to this supposed intrinsic property and some time, to the effect that *some* event which has that property is occurring at that time, and (3) facts with regard to some property, which is a *specific way* of having the supposed intrinsic property (in the sense above explained in which "being red" is a specific way of "being coloured") and some time, to the effect that some event which has that specific property is occurring at that time. Of course, there not only are not, but *cannot* be, facts of any of these kinds, unless there is an intrinsic property related to what each of us (on any occasion) expresses by "I am conscious now," in the manner defined above; and I feel very doubtful whether there is any such property; in other words, although I know for certain both that I have had many experiences, and that I have had experiences of many different kinds, I feel very doubtful whether to say the first is the same thing as to say that there have been many events, each of which was an experience and an experience of mine, and whether to say the second is the same thing as to say that there have been many events, each of which was an experience of mine, and each of which also had a different property, which was a specific way of being an experience. The proposition that I have had experiences does not necessarily entail the proposition that there have been any events which were experiences; and I cannot satisfy myself that I am acquainted with any events of the supposed kind. But yet it seems to me possible that the proposed analysis of "I am conscious now" is correct: that I am really acquainted with events of the supposed kind, though I cannot see that I am. And *if* I am, then I should wish to call the three kinds of facts defined above "mental facts." Of course, if there are "experiences" in the sense defined, it would be possible (as many have held) that there *can* be no experiences

which are not *some individual's* experiences; and in that case any fact of any of these three kinds would be logically dependent on, though not necessarily identical with, some fact of class (α) or (β). But it seems to me also a possibility that, if there are "experiences," there might be experiences which did not belong to any individual; and, in that case, there would be "mental facts" which were neither identical with nor logically dependent on any fact of class (α) or (β).

(c) Finally some philosophers have, so far as I can make out, held that there are or may be facts, which are facts with regard to some individual, to the effect that he is conscious, or is conscious in some specific way, which differ from facts of classes (α) and (β), in the important respect that they are not facts *with regard to any time*: they have conceived the possibility that there may be one or more individuals, who are *timelessly* conscious, and timelessly conscious in specific modes. And others, again, have, I think, conceived the hypothesis that the intrinsic property defined in (b) may be one which does not belong only to *events*, but may also belong to one or more wholes, which do *not* occur at any time: in other words, that there may be one or more *timeless* experiences, which might or might not be the experiences of some individual. It seems to me very doubtful whether any of these hypotheses are even possibly true; but I cannot see for certain that they are not possible: and, if they are possible, then I should wish to give the name "mental fact" to any fact (if there were any) of any of the five following kinds, viz. (1) to any fact which is the fact, with regard to any individual, that he is *timelessly* conscious, (2) to any fact which is the fact, with regard to any individual, that he is *timelessly* conscious in any specific way, (3) to any fact which is the fact with regard to a *timeless* experience that it exists, (4) to any fact which is the fact with regard to the supposed intrinsic property "being an experience," which is the fact that something timelessly exists which has that property, and (5) to any fact which is the fact, with regard to any property, which is a specific mode of this supposed intrinsic property, that something timelessly exists which has that property.

I have then defined three different kinds of facts, each of which is such that, if there *were* any facts of that kind (as there certainly *are*, in the case of the first kind), the facts in question *would be* "mental facts" in my sense; and to complete the definition of the limited sense in which I am using "mental facts," I have only to add that I wish also to apply the name to one *fourth* class of facts: namely to any fact, which is the fact, with regard to any of these three kinds of facts, or any kinds included in them, *that there are facts of the kind in question*; i.e., not only will each individual fact of class (α) be, in my sense, a "mental fact," but also the general fact "that there are facts of class (α)," will itself be a "mental fact"; and similarly in all other cases: e.g., not only will the fact that I am now perceiving [which is a fact of class (β)] be a "mental fact," but also the general fact that *there are* facts, with regard to individuals and times, to the effect that the in-

dividual in question is perceiving at the time in question, will be a "mental fact."

A. Understanding "physical fact" and "mental fact" in the senses just explained I hold, then, that there is no good reason to suppose that *every* physical fact is *logically* dependent upon some mental fact. And I use the phrase, with regard to two facts, F_1 and F_2 , " F_1 is *logically dependent* on F_2 ," wherever and only where F_1 entails F_2 , either in the sense in which the proposition "I am seeing now" entails the proposition "I am conscious now," or the proposition (with regard to any particular thing) "This is red" entails the proposition (with regard to the same thing) "This is coloured," or else in the more strictly logical sense in which (for instance) the conjunctive proposition "All men are mortal, and Mr. Baldwin is a man" entails the proposition "Mr. Baldwin is mortal." To say, then, of two facts, F_1 and F_2 , that F_1 is *not* logically dependent upon F_2 , is only to say that F_1 *might* have been a fact, even if there had been no such fact as F_2 ; or that the conjunctive proposition " F_1 is a fact, but there is no such fact as F_2 " is a proposition which is not self-contradictory, i.e., does not entail both of two mutually incompatible propositions.

I hold, then, that, in the case of *some* physical facts, there is no good reason to suppose that there is some mental fact, such that the physical fact in question could not have been a fact unless the mental fact in question had also been one. And my position is perfectly definite, since I hold that this is the case with all the four physical facts, which I have given as examples of physical facts. E.g., there is no good reason to suppose that there is any mental fact whatever, such that the fact that that mantel-piece is at present nearer to my body than that book-case could not have been a fact, unless the mental fact in question had also been a fact; and, similarly, in all the other three cases.

In holding this I am certainly differing from some philosophers. I am, for instance, differing from Berkeley, who held that that mantel-piece, that book-case, and my body are, all of them, either "ideas" or "constituted by ideas," and that no "idea" can possibly exist without being perceived. He held, that is, that this physical fact is logically dependent upon a mental fact of my fourth class: namely a fact which is the fact that there is at least one fact, which is a fact with regard to an individual and the present time, to the effect that that individual is now perceiving something. He does not say that this physical fact is logically dependent upon any fact which is a fact of any of my first three classes, e.g., on any fact which is the fact, with regard to a particular individual and the present time, that *that* individual is now perceiving something: what he does say is that the physical fact couldn't have been a fact, unless it had been a fact that there was *some* mental fact of this sort. And it seems to me that many philosophers, who would perhaps disagree either with Berkeley's assumption that my body is an "idea" or "constituted by ideas," or with his assumption that "ideas" cannot exist with-

out being perceived, or with both, nevertheless would agree with him in thinking that this physical fact is logically dependent upon *some* "mental fact"; e.g., they might say, that it could not have been a fact, unless there had been, at some time or other, or, were timelessly, *some* "experience." Many, indeed, so far as I can make out, have held that *every* fact is logically dependent on every other fact. And, of course, they have held in the case of their opinions, as Berkeley did in the case of his, that they had good reasons for them.

B. I also hold that there is no good reason to suppose that *every* physical fact is *causally* dependent upon some mental fact. By saying that F_1 is *causally* dependent on F_2 , I mean only that F_1 *wouldn't* have been a fact unless F_2 had been; *not* (which is what "logically dependent" asserts) that F_1 *couldn't conceivably* have been a fact, unless F_2 had been. And I can illustrate my meaning by reference to the example which I have just given. The fact that that mantel-piece is at present nearer to my body than that book-case, is (as I have just explained) so far as I can see, not *logically* dependent upon any mental fact; it *might* have been a fact, even if there have been no mental facts. But it certainly is *causally* dependent on many mental facts: my body *would* not have been here unless I had been conscious in various way in the past; and the mantel-piece and the book-case certainly *would* not have existed, unless other men had been conscious too.

But with regard to two of the facts, which I gave as instances of physical facts, namely the fact that the earth has existed for many years past, and the fact that the moon has for many years past been nearer to the earth than to the sun, I hold that there is no good reason to suppose that these are causally dependent upon any mental fact. So far as I can see, there is no reason to suppose that there is any mental fact of which it could be truly said: unless this fact had been a fact, the earth would not have existed for many years past. And in holding this, again, I think I differ from some philosophers. I differ, for instance, from those who have held that all material things were created by God, and that they had good reasons for sup-
porting this.

III. I have just explained that I differ from those philosophers who have held that there is good reason to suppose that all material things were created by God. And it is, I think, an important point in my position, which should be mentioned, that I differ also from all philosophers who have held that there is good reason to suppose that there is a God at all, whether or not they have held it likely that he created material things.

And similarly, whereas some philosophers have held that there is good reason to suppose that we, human beings, shall continue to exist and to be conscious after the death of our bodies, I hold that there is no good reason to suppose this.

IV. I now come to a point of a very different order.

As I have explained under I, I am not at all sceptical as to the *truth* of such propositions as "The earth has existed for many years past," "Many human bodies have each lived for many years upon it," i.e., propositions which assert the existence of material things: on the contrary, I hold that we all know, with certainty, many such propositions to be true. But I am very sceptical as to what, in certain respects, the correct *analysis* of such propositions is. And this is a matter as to which I think I differ from many philosophers. Many seem to hold that there is no doubt at all as to their *analysis*, nor, therefore, as to the analysis of the proposition "Material things have existed," in certain respects in which I hold that the analysis of the propositions in question is extremely doubtful; and some of them, as we have seen, while holding that there is no doubt as to their *analysis*, seem to have doubted whether any such propositions are *true*. I, on the other hand, while holding that there is no doubt whatever that many such propositions are wholly true, hold also that no philosopher, hitherto, has succeeded in suggesting an analysis of them, as regards certain important points, which comes anywhere near to being certainly true.

It seems to me quite evident that the question how propositions of the type I have just given are to be analysed, depends on the question how propositions of another and simpler type are to be analysed. I know, at present, that I am perceiving a human hand, a pen, a sheet of paper, etc.; and it seems to me that I cannot know how the proposition "Material things exist" is to be analysed, until I know how, in certain respects, these simpler propositions are to be analysed. But even these are not simple enough. It seems to me quite evident that my knowledge that I am now perceiving a human hand is a deduction from a pair of propositions simpler still—propositions which I can only express in the form "I am perceiving *this*" and "*This* is a human hand." It is the analysis of propositions of the latter kind, which seems to me to present such great difficulties; while nevertheless the whole question as to the nature of material things obviously depends upon their analysis. It seems to me a surprising thing that so few philosophers, while saying a great deal as to what material things *are* and as to what it is to perceive them, have attempted to give a clear account as to what precisely they suppose themselves to *know* (or to *judge*, in case they have held that we don't *know* any such propositions to be true, or even that no such propositions *are* true) when they know or judge such things as "This is a hand," "That is the sun," "This is a dog," etc., etc., etc.

Two things only seem to me to be quite certain about the analysis of such propositions (and even with regard to these I am afraid some philosophers would differ from me) namely that whenever I know, or judge, such a proposition to be true, (1) there is always some *sense-datum* about which the proposition in question is a proposition—some sense-datum which is a subject (and, in a certain sense, the principal or ultimate subject) of the

proposition in question, and (2) that, nevertheless, *what* I am knowing or judging to be true about this sense-datum is not (in general) that it is itself a hand, or a dog, or the sun, etc., etc., as the case may be.

Some philosophers have I think doubted whether there are any such things as other philosophers have meant by "sense-data" or "sensa." And I think it is quite possible that some philosophers (including myself, in the past) have used these terms in senses, such that it is really doubtful whether there are any such things. But there is no doubt at all that there are sense-data, in the sense in which I am now using that term. I am at present seeing a great number of them, and feeling others. And, in order to point out to the reader what sort of things I mean by sense-data, I need only ask him to look at his own right hand. If he does this he will be able to pick out something (and, unless he is seeing double, *only* one thing) with regard to which he will see that it is, at first sight, a natural view to take that that thing is identical, not, indeed, with his whole right hand, but with that part of its surface which he is actually seeing, but will also (on a little reflection) be able to see that it is doubtful whether it can be identical with the part of the surface of his hand in question. Things *of the sort* (in a certain respect) of which this thing is, which he sees in looking at his hand, and with regard to which he can understand how some philosophers should have supposed it to be the part of the surface of his hand which he is seeing, while others have supposed that it can't be, are what I mean by "sense-data." I therefore define the term in such a way that it is an open question whether the sense-datum which I now see in looking at my hand and which is a sense-datum of my hand is or is not identical with that part of its surface which I am now actually seeing.

That what I know, with regard to this sense-datum, when I know "This is a human hand," is not that it is *itself* a human hand, seems to me certain because I know that my hand has many parts (e.g., its other side, and the bones inside it), which are quite certainly *not* parts of this sense-datum.

I think it certain, therefore, that the analysis of the proposition "This is a human hand" is, roughly at least, of the form "There is a thing, and only one thing, of which it is true both that it is a human hand and that *this surface* is a part of its surface." In other words, to put my view in terms of the phrase "theory of representative perception," I hold it to be quite certain that I do not *directly* perceive *my hand*; and that when I am said (as I may be correctly said) to "perceive" it, that I "perceive" it means that I perceive (in a different and more fundamental sense) something which is (in a suitable sense) *representative* of it, namely, a certain part of its surface.

This is all that I hold to be *certain* about the analysis of the proposition "This is a human hand." We have seen that it includes in its analysis a proposition of the form "This is part of the surface of a human hand" (where "This," of course, has a different meaning from that which it has in the original proposition which has now been analysed). But this proposition

also is undoubtedly a proposition about the sense-datum, which I am seeing, which is a sense-datum *of* my hand. And hence the further question arises: *What*, when I know "*This is part of the surface of a human hand*," am I knowing about the sense-datum in question? Am I, in this case, really knowing, about the sense-datum in question that it *itself* is part of the surface of a human hand? Or, just as we found in the case of "*This is a human hand*," that what I was knowing about the sense-datum was certainly not that it *itself* was a human hand, so, is it perhaps the case, with this new proposition, that even here I am not knowing, with regard to the sense-datum, that it is *itself* part of the surface of a hand? and, if so, what is it that I am knowing about the sense-datum itself?

This is the question to which, as it seems to me, no philosopher has hitherto suggested an answer which comes anywhere near to being certainly true.

There seem to me to be three, and only three, alternative types of answer possible; and to any answer yet suggested, of any of these types, there seem to me to be very grave objections.

(1) Of the first type, there is but one answer: namely, that in this case what I am knowing really is that the sense-datum *itself* is part of the surface of a human hand. In other words that, though I don't perceive *my hand* directly, I do *directly* perceive part of its surface; that the sense-datum itself *is* this part of its surface and not merely something which (in a sense yet to be determined) "represents" this part of its surface; and that hence the sense in which I "perceive" this part of the surface of my hand, is not in its turn a sense which needs to be defined by reference to yet a third more ultimate sense of "perceive," which is the only one in which perception is direct, namely that in which I perceive the sense-datum.

If this view is true (as I think it may just possibly be), it seems to me certain that we must abandon a view which has been held to be certainly true by most philosophers, namely the view that our sense-data always really have the qualities which they sensibly appear to us to have. For I know that if another man were looking through a microscope at the same surface which I am seeing with the naked eye, the sense-datum which he saw would sensibly appear to him to have qualities very different from and incompatible with those which my sense-datum sensibly appears to me to have: and yet, if my sense-datum is identical with the surface we are both of us seeing, his must be identical with it also. My sense-datum can, therefore, be identical with this surface only on condition that it is identical with his sense-datum; and, since his sense-datum sensibly appears to him to have qualities incompatible with those which mine sensibly appears to me to have, his sense-datum can be identical with mine, only on condition that the sense-datum in question either has not got the qualities which it sensibly appears to me to have, or has not got those which it sensibly appears to him to have.

I do not, however, think that this is a fatal objection to this first type of view. A far more serious objection seems to me to be that, when we see a thing double (have what is called "a double image" of it), we certainly have *two* sense-data each of which is *of* the surface seen, and which cannot therefore both be identical with it; and that yet it seems as if, if any sense-datum is ever identical with the surface *of* which it is a sense-datum, each of these so-called "images" must be so. It looks, therefore, as if every sense-datum is, after all, only "representative" of the surface, *of* which it is a sense-datum.

(2) But, if so, what relation has it to the surface in question?

This second type of view is one which holds that when I know "This is part of the surface of a human hand," what I am knowing with regard to the sense-datum which is *of* that surface, is, *not* that it is *itself* part of the surface of a human hand, but something of the following kind. There is, it says, *some* relation, *R*, such that what I am knowing with regard to the sense-datum is either "There is one thing and only one thing, of which it is true both that it is a part of the surface of a human hand, and that it has *R* to this sense-datum," or else "There are a set of things, of which it is true both that that set, taken collectively, *are* part of the surface of a human hand, and also that each member of the set has *R* to his sense-datum, and that nothing which is not a member of the set has *R* to it."

Obviously, in the case of this second type, many different views are possible, differing according to the view they take as to what the relation *R* is. But there is only one of them, which seems to me to have any plausibility; namely that which holds that *R* is an ultimate and unanalysable relation, which might be expressed by saying that "*xRy*" means the same as "*y* is an appearance or manifestation of *x*." I.e., the analysis which this answer would give of "This is part of the surface of a human hand" would be "There is one and only one thing which it is true both that it is part of the surface of a human hand, and that this sense-datum is an appearance or manifestation of it."

To this view also there seem to me to be very grave objections, chiefly drawn from a consideration of the questions how we can possibly *know* with regard to any of our sense-data that there is one thing and one thing only which has to them such a supposed ultimate relation; and how, if we do, we can possibly *know* anything further about such things, e.g., of what size or shape they are.

(3) The third type of answer, which seems to me to be the only possible alternative if (1) and (2) are rejected, is the type of answer which J. S. Mill seems to have been implying to be the true one when he said that material things are "permanent possibilities of sensation." He seems to have thought that when I know such a fact as "This is part of the surface of a human hand," what I am knowing with regard to the sense-datum which is the principal subject of that fact, is not that it is itself part of the surface

of a human hand, nor yet, with regard to any relation, that *the* thing which has to it that relation is part of the surface of a human hand, but a whole set of hypothetical facts each of which is a fact of the form "If *these* conditions had been fulfilled, I should have been perceiving a sense-datum intrinsically related to *this* sense-datum in *this* way," "If *these* (other) conditions had been fulfilled, I should have been perceiving a sense-datum intrinsically related to this sense-datum in *this* (other) way," etc., etc.

With regard to this third type of view as to the analysis of propositions of the kind we are considering, it seems to me, again, just *possible* that it is a true one; but to hold (as Mill himself and others seem to have held) that it is *certainly*, or nearly certainly, true, seems to me as great a mistake, as to hold with regard either to (1) or to (2), that they are *certainly*, or nearly certainly, true. There seem to me to be very grave objections to it; in particular the three, (a) that though, in general, when I know such a fact as "This is a hand," I certainly do know some hypothetical facts of the form "If *these* conditions had been fulfilled, I should have been perceiving a sense-datum of *this* kind, which would have been a sense-datum of the same surface of which *this* is a sense-datum," it seems doubtful whether any conditions with regard to which I know this are not themselves conditions of the form "If this and that *material thing* had been in those positions and conditions . . ." (b) that it seems again very doubtful whether there is any intrinsic relation, such that my knowledge that (under *these* conditions) I should have been perceiving a sense-datum of *this* kind, which would have been a sense-datum of the same surface of which *this* is a sense-datum is equivalent to a knowledge, with regard to that relation, that I should, under those conditions, have been perceiving a sense-datum related by it to *this* sense-datum and (c) that, if it were true, the sense in which a material surface is "round" or "square," would necessarily be utterly different from that in which our sense-data sensibly appear to us to be "round" or "square."

V. Just as I hold that the proposition "There are and have been material things" is quite certainly true, but that the question how this proposition is to be analysed is one to which no answer that has been hitherto given is anywhere near certainly true; so I hold that the proposition "There are and have been many Selves" is quite certainly true, but that here again all the analyses of this proposition that have been suggested by philosophers are highly doubtful.

That I am now perceiving many different sense-data, and that I have at many times in the past perceived many different sense-data, I know for certain—that is to say, I know that there are mental facts of class (β), connected in a way which it is proper to express by saying that they are all of them facts about *me*; but how this kind of connection is to be analysed, I

do not know for certain, nor do I think that any other philosopher knows with any approach to certainty. Just as in the case of the proposition "This is part of the surface of a human hand," there are several extremely different views as to its analysis, each of which seems to me *possible*, but none nearly certain, so also in the case of the proposition "This, that and that sense-datum are all at present being perceived by *me*," and still more so in the case of the proposition "I am now perceiving this sense-datum, and I have in the past perceived sense-data of these other kinds." Of the *truth* of these propositions there seems to me to be no doubt, but as to what is the correct analysis of them there seems to me to be the gravest doubt—the true analysis may, for instance, *possibly* be quite as paradoxical as is the third view given above under IV as to the analysis of "This is part of the surface of a human hand"; but whether it is as paradoxical as this seems to me to be quite as doubtful as in that case. Many philosophers, on the other hand, seem to me to have assumed that there is little or no doubt as to the correct analysis of such propositions; and many of these, just reversing my position, have also held that the propositions themselves are not true.

A Reply to My Critics: Analysis

by G. E. MOORE

I cannot possibly do justice to Mr. Langford's essay. He seems to me to raise an immense number of very puzzling questions which deserve examination; but my time is very limited, and on many of those questions I do not at all know what to say. All I can try to do is "to state more explicitly my own position regarding the nature of analysis," which is what Mr. Langford (pp. 323f) says that he wanted to induce me to do; and even here I shall not be able to do more than to try to make clear some comparatively simple points.

I think that what Mr. Langford must primarily want is a statement as to how I myself have intended to use, and, so far as I know, actually used, the word "analysis." Other people may have used it in different senses, but I do not think he wants me to state my position with regard to what they

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may have meant by it. And as to how I have intended to use it (and, I believe, actually used it), I think I can say three fairly definite things.

(1) Let us, as Mr. Langford does, call that which is to be analysed the *analysandum*. He himself tries to explain to us what he calls two "different views as to the nature of analysis," but which, I think, might be called two different ways in which the word "analysis" might be used. And he seems to say that, if the word is used in the first way, the *analysandum* will be an "idea" or a "concept" or a "proposition," whereas if it is used in the second way it will be a "verbal expression" (p. 336).

Now I think I can say quite definitely that I never intended to use the word in such a way that the *analysandum* would be a *verbal expression*. When I have talked of analysing anything, *what* I have talked of analysing has always been an idea or concept or proposition, and *not* a verbal expression; that is to say, if I talked of analysing a "proposition," I was always using "proposition" in such a sense that no verbal expression (no sentence, for instance) can be a "proposition," in that sense. There is, of course, a sense in which verbal expressions can be "*analysed*." To take an example from Mr. Langford: Consider the verbal expression "*x* is a small *y*." I should say that you could quite properly be said to be analysing this expression if you said of it: "It contains the letter '*x*,' the word '*is*,' the word '*a*,' the word '*small*,' and the letter '*y*,' and it begins with '*x*,' '*is*' comes next in it, then '*a*,' then '*small*,' and then '*y*.'" It seems to me that nothing but making some such statement as this could properly be called "giving an analysis of a verbal expression." And I, when I talked of "giving an analysis," have never meant anything at all like this.

(2) Mr. Langford seems to imply (p. 336) that he thinks that to make the statement: "'*X* is a small *Y*' means what is meant by '*X* is a *Y* and is smaller than most *Y*'s,'" could be properly called giving an analysis of the verbal expression "*X* is a small *Y*." I do not think it could. But I wish to make it plain that I never intended so to use the word "analysis," that by making a statement of this sort you would be *giving an analysis* at all. I think many philosophers (e.g., Mr. W. E. Johnson) have supposed that by making this statement you would be giving an analysis, not indeed of the verbal expression "*X* is a small *Y*," but of the concept "*is* a small *Y*." And I may, perhaps (I do not know), sometimes have talked as if, by making a statement of this sort you were giving an analysis of some *concept* expressed by the verbal expression which appears between inverted commas: as if, e.g., by saying "'*x* is a brother' means the same as '*x* is male and is a sibling,'" I were giving an analysis of the *concept* "being a brother." But, if I have done so, it was merely through a confusion, which I shared with others, as to what you *are* doing, when you make such a statement: Had I seen what you are doing, I should never have called making such a statement "giving an analysis." For what are you doing? You are merely asserting, with regard

to two verbal expressions, that they have (to use an expression of Mr. W. E. Johnson's) *some* the same meaning, or, at best, that they each have only one meaning, and that the meaning they have is the same. You are not *mentioning* the meaning of either, or saying *what* the meaning of either is; but are merely making a statement, which could be completely understood by a person who had not the least idea what either expression meant. A man might point out to me two expressions in a language of which I was completely ignorant and tell me that they had the same meaning, without telling me *what* they meant. So far as he was merely telling me that they had the same meaning, I should completely understand what he told me—namely that those two expressions had the same meaning. What could be a clearer statement? I see the two expressions to which he points, in a book that he shows me, and I know what is meant by saying that two expressions have the same meaning. But if this were all he was doing, he would not have told me anything at all about any *concept* or *idea*, which either of the expressions expressed; and would therefore certainly *not* have been giving me an analysis of any *concept*, just as, also, he would certainly *not* have given me an analysis of any expression.

I certainly, therefore, never intended to use the word "analysis" in such a way that a statement of this sort, which *merely* asserts that two expressions have the same meaning, would "give an analysis" at all.

(3) Another fairly definite thing which I can say about how I intended to use (and, I believe, used) the word "analysis," is that I certainly did not intend to use it in the *first* of the two ways described by Mr. Langford. Mr. Langford has convinced me of the three following propositions: (a) that a man may know that an object which he sees is a cube without knowing that it has twelve edges; (b) that a man may verify that an object which he sees is a cube, without verifying that it has twelve edges; and (c) that it is incorrect to say that the expression "*x* is a cube," when used as we actually use it, is synonymous with the expression "*x* is a cube with twelve edges," when used with its standard English meaning. And I think that I always intended so to use the word "analysis" that from any *one* of these three propositions by itself, it would *follow* that the concept "having twelve edges" did not "enter into the *analysis*" of the concept "cube." It seems to me quite evident that from the function "*x* is a cube," there follows "logically" (and not merely "causally," as Mr. Langford suggests) the function "*x* is a cube and has twelve edges," and *vice versa*. But, in spite of the fact that these two functions are logically equivalent, I should have taken any one of the propositions (a), (b), and (c) as entailing the conclusion that the concept "having twelve edges" did not enter into the analysis of the concept "cube." Perhaps I can formulate three conditions, which were necessary, if one was to be said to be "giving an analysis" in my sense, as follows: If you are to "give an analysis" of a given *concept*, which is the

analysandum, you must mention, as your *analysans*, a *concept* such that (a) nobody can know that the *analysandum* applies to an object without knowing that the *analysans* applies to it, (b) nobody can verify that the *analysandum* applies without verifying that the *analysans* applies, (c) any expression which expresses the *analysandum* must be synonymous with any expression which expresses the *analysans*.

Now it will be seen, that if I am right in these statements as to my intended and actual usage of the word "analysis," it follows that my usage was not the same as either of the two possible usages described by Mr. Langford. It was not the same as his first usage, because of the necessary conditions for "analysis" in my sense, stated in (3). And it was not the same as his second usage, because in his second usage, as stated by him, the *analysandum* is a verbal expression, whereas, in my usage, the *analysandum* *must* be a concept, or idea, or proposition, and *not* a verbal expression. Mr. Langford calls his second usage a "formal" usage—a usage such that any analysis which is an analysis in that sense can be called a "formal" analysis; and in his concluding sentence he implies that I have spoken as if all analysis were formal. But, if I am right in what I said under (1) as to my usage, he is making a mistake in saying that I have implied this, provided that he himself is right in stating that it is a necessary condition for what he means by a formal analysis that the *analysandum* should be a verbal expression. But, if my sense of "analysis" is neither of those which Mr. Langford describes, what can it be? Is there a third alternative?

I will try to describe what I think my usage was. It must be emphasized, first of all, that, in my usage, both *analysandum* and *analysans* must be concepts or propositions, *not* mere verbal expressions. But, of course, in order to *give* an analysis, you must *use* verbal expressions. What will be the proper way of *expressing* what I should call an analysis? I can give several. Suppose I say: "The concept 'being a brother' is identical with the concept 'being a male sibling.'" I should say that, in making this assertion, I am "giving an analysis" of the concept "being a brother"; and, if my assertion is true, then I am giving a correct analysis of this concept. But I might also give the same analysis of the same concept by saying: "The propositional function 'x is a brother' is identical with the propositional function 'x is a male sibling.'" And I might also give the same analysis by saying: "To say that a person is a brother is the same thing as to say that that person is a male sibling." And one important thing to notice about these ways of expressing an analysis is that they all avoid the use of the word "means." It is, in my view, very important to avoid the use of this word, because by using it, you at once imply that the *analysandum* is a *verbal expression*, and therefore give a false impression as to what the assertion is that you really wish to make. I am afraid it is pretty certain that I have often, in giving analyses, used this word "means" and thus given a false

impression; the fact being that for a long time I did not distinguish clearly between *defining* a word or other verbal expression, and *defining* a concept. To define a concept is the same thing as to give an analysis of it; but to define a word is neither the same thing as to give an analysis of that word, nor the same thing as to give an analysis of any concept.

But, now, if we say, as I propose to, that to make any of the above three statements is to "give an analysis" of the concept "brother," we are obviously faced with the puzzle which Mr. Langford calls "the paradox of analysis." Suppose we use still another way, a fourth way, of expressing the very same statement which is expressed in those three ways I gave, and say: "To be a brother is the same thing as to be a male sibling." The paradox arises from the fact that, *if* this statement is true, then it seems as if it must be the case that you would be making exactly the same statement if you said: "To be a brother is the same thing as to be a brother." But it is obvious that these two statements are *not* the same; and obvious also that nobody would say that by asserting "To be a brother is to be a brother" you were giving an analysis of the concept "brother." It is these facts, I think, which drive Mr. Langford to say that, in what he calls a "formal" analysis, both *analysandum* and *analysans* must be mere verbal expressions and that what is stated in giving the analysis must be merely that two verbal expressions have the same meaning. But I think this solution of his is obviously wrong, because if *all* you were asserting was that the first verbal expression had the same meaning as the second, nobody would call the making of such an assertion the "giving an analysis" *either* of the first expression *or* of any concept. Now I own I am not at all clear as to what the solution of the puzzle is. An obvious suggestion to make is that, if you say "To be a brother is the same thing as to be a male sibling," you are making a statement *both* about the *concept* brother and also about the two verbal expressions used; which would explain why this statement is not the same statement as the statement "To be a brother is the same thing as to be a brother." But this suggestion would be compatible with its being the case that the assertion "To be a brother is the same thing as to be a male sibling" is merely a *conjunction* of the assertion "The verbal expression 'x is a brother' has the same meaning as the expression 'x is a male sibling'" with some other assertion which is merely an assertion about the *concept* "x is a brother" and not an assertion about any verbal expression. But I do not think this can possibly be the case: what would the second assertion in this supposed conjunction be? I think that, in order to explain the fact that, even if "To be a brother is the same thing as to be a male sibling" is true, yet nevertheless this statement is *not* the same as the statement "To be a brother is to be a brother," one *must* suppose that both statements are in some sense about the expressions used as well as about the concept of being a brother. But in *what* sense they are about the expressions used I cannot see clearly; and

therefore I cannot give any clear solution to the puzzle. The two plain facts about the matter which it seems to me one must hold fast to are these: That if in making a given statement one is to be properly said to be "giving an analysis" of a *concept*, then (a) both *analysandum* and *analysans* must be *concepts*, and, if the analysis is a *correct* one, must, in some sense, be *the same concept*, and (b) that the expression used for the *analysandum* must be a different *expression* from that used for the *analysans*.

These are two plain facts about the way in which I intended to use (and, I think, used) the term "analysis," and a third may be added: namely this: (c) that the expression used for the *analysandum* must not only be *different* from that used for the *analysans*, but that they must differ in this way, namely, that the expression used for the *analysans* must *explicitly mention* concepts which are not explicitly mentioned by the expression used for the *analysandum*. Thus the expression "*x* is a male sibling" *explicitly mentions* the concepts "male" and "sibling," whereas the expression "*x* is a brother" does not. It is true, of course, that the former expression not only *mentions* these concepts, but also mentions the *way in which they are combined* in the concept "brother," which is, in this case, the way of mere conjunction, but in other cases may be very different from mere conjunction. And that the *method of combination* should be explicitly mentioned by the expression used for the *analysans* is, I think, also a necessary condition for the giving of an analysis. From these two conditions there follows, I think, that the expression used for the *analysans* must be "less idiomatic," in Mr. Langford's sense, than that used for the *analysandum*. And this condition, in accordance with his view (which I consider mistaken) that in what he calls a "formal" analysis both *analysandum* and *analysans* are merely verbal expressions, he expresses (wrongly, as I think) by saying (pp. 337f) that the *analysans* must be less idiomatic than the *analysandum*.

This is all that I can say about my use of the term "analysis." For a full discussion of the subject it would be necessary to raise the question why I say that the concept "*x* is a male sibling" is *identical* with the concept "*x* is a brother," but refuse to say that the concept "*x* is a cube with twelve edges" is *identical* with the concept "*x* is a cube," although I insist that these latter *are* "logically equivalent." To raise this question would be to raise the question how an "analytic" necessary connection is to be distinguished from a "synthetic" one—a subject upon which I am far from clear. It seems to me that there are ever so many different cases of necessary connection, and that the line between "analytic" and "synthetic" might be drawn in many different ways. As it is, I do not think that the two terms have any clear meaning. I do not know, at all clearly, *what* I mean by saying that "*x* is a brother" is *identical* with "*x* is a male sibling," and that "*x* is a cube" is *not identical* with "*x* is a cube with twelve edges." It is obvious, for instance, that, in a sense, the expression "*x* is a brother" is *not* synonymous with, has *not* the same meaning as, "*x* is a male sibling," since if you

were to translate the French word *frère* by the expression "male sibling," your translation would be incorrect, whereas if you were to translate it by "brother," it would not.

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BERTRAND RUSSELL

1872–

Introduction

Bertrand Russell has exercised an influence on the course of philosophy in the twentieth century second to that of no other individual. And yet, unlike many influential thinkers, he has neither founded nor attached himself to any definite movement. His philosophizing is markedly empiricistic and analytical, but his independent spirit has always shied away from giving full allegiance to the movements that go under those titles. Although he has wanted above all to be empirical, he has always had reservations of one sort or another to the proposition that all of our common-sense beliefs can be derived from purely empirical premises. And although he has done as much as any man to give philosophy the analytical flavor it currently has in Anglo-Saxon climes, he has never embraced the thesis that philosophy is nothing but analysis.

Born in 1872, the offspring of a distinguished family (his paternal grandfather, Lord John Russell, was a prime minister who introduced the Reform Bill in 1832), Russell was educated at Cambridge University, where he studied mathematics and philosophy. At Cambridge he came into contact with men who were to have a decisive role in shaping his philosophical bent, notably G. E. Moore and A. N. Whitehead. Russell has had a very unconventional career for a twentieth-century British philosopher. It began properly enough with a fellowship and later a lectureship at Trinity College, Cambridge. This academic career was

interrupted in 1916, when his fellowship was terminated because of his active opposition to the war effort—activities which eventually resulted in a six months' prison sentence. Since that time Russell has supported himself almost entirely by writing and lecturing. As this might suggest, his writings have not been confined to analytical philosophy. They include works on politics (*Freedom and Organization; Power: A New Social Analysis*), education (*Education and the Social Order*), religion (*Religion and Science; Why I Am Not a Christian*), as well as popular expositions of scientific theories (*The ABC of Atoms; The ABC of Relativity*). His trenchant views on sexual morality (*Marriage and Morals*) have attained notoriety out of all proportion to their relative importance in his life work. In recent years he has produced a volume of short stories (*Satan in the Suburbs*) and a book of satirical sketches (*Nightmares of Eminent Persons*). (This is only a small sample of the writings in these categories.) Nor have his activities been confined to the written word. As he tells us, "I grew up in an atmosphere of politics, and was expected by my elders to take up a political career."¹ Although his only attempts at a political life were unsuccessful bids for Parliament in 1907, 1922, and 1923, he has repeatedly engaged in public affairs in a less official way. Whenever a major issue confronts the world, Russell's voice can be heard, the latest example being his efforts on behalf of a ban on H-bomb testing.

Russell's first major philosophical concern was the philosophy of mathematics, though, characteristic of the spread of his interests and activity, his first book was *German Social Democracy*, and his first purely philosophical work was *A Critical Exposition of the Philosophy of Leibniz*. He has said: "I came to philosophy through mathematics, or rather through the wish to find some reason to believe in the truth of mathematics. From early youth, I had an ardent desire to believe that there can be such a thing as knowledge, combined with a great difficulty in accepting much that passes as knowledge."² This may seem a strange motivation for the study of philosophy, but Russell had to a high degree the gift, which has been called the specifically philosophical gift, of finding problems where to others all is clear and simple. This drive eventually led to Russell's part in one of the major intellectual achievements of this century, *Principia Mathematica* (1910–1913), which Russell co-authored with A. N. Whitehead. In this work the authors (with certain reservations that we need not consider here) claim to derive logically all pure mathematics from certain definitions and axioms of formal logic.

With the completion of *Principia Mathematica* Russell was free to pursue other philosophical interests. In the course of carrying out the reduction of mathematics to logic, a new logic and new tools of logical analysis had been developed; and Russell was quick to see applications of these techniques to philosophical problems outside mathematics. These applications led straight to the sort of philosophy Russell called "logical atomism." "I hold that logic is what is fundamental in philosophy, and that schools should be characterized rather by their logic than by their metaphysic. My own logic is atomic, and it is this aspect upon which I should wish to lay stress."³ Since the lectures reproduced here constitute an introduction to logical atomism for the general reader, and one on which one could not hope to improve, we shall confine ourselves to bringing together in capsule form the main features of this philosophy and show-

ing its significant connections with what preceded and succeeded it in Russell's work, as well as with allied work of other philosophers.

The achievement of *Principia Mathematica* can be expressed in the following way. Mathematical concepts, that is, numbers, are reduced to (analyzed in terms of) logical concepts. A pattern of definitions is set up such that anything we say involving numbers can be restated in such a way that numerals do not appear in the restatement, but instead terms belonging to the logical framework of language—"and," "or," "not," "there is something that ———," "is identical with," etc. For example, "I have exactly one car" can be restated as follows: "There is something that is a car belonging to me and that is such that anything that is a car belonging to me is identical with it." And "I have exactly two cars" would become "There is an entity, x , and an entity, y , such that x is my car and y is my car, and such that x is not identical with y and for anything, if it is my car, it is identical either with x or with y ." (The restatements of purely mathematical statements, even simple ones like "2 plus 2 equals 4," are too complicated for illustration here.) These translations are typical in that the numerals are not simply replaced with logical terms; instead, the whole sentence needs rewriting. And of course different sorts of sentences need rewriting in different ways. This technique was called "contextual definition." It involves giving an equivalent for a kind of context in which the term in question appears, rather than giving an equivalent for the term that could be substituted for it in any context.

Now what value does this have, other than as an exercise in logical ingenuity? What is the point of talking mathematics without numerals rather than with? Why reduce numerals to logical terms rather than vice versa? There seem to be several different answers to this question.

1. *Economy*. If *Principia Mathematica* is correct, all mathematical discourse can be expressed by the use of logical terms; but the converse obviously does not hold, for logical terms occur in all sorts of discourse constituting the basis skeleton of all utterance. This means that we can get along with logical terms and no numerals, but not vice versa. Thus, if we are seeking the minimum set of terms by means of which everything can be expressed, we will take the logical version of "I have exactly two cars" to be more fundamental.

2. *Clarity*. Logical concepts are clearer than mathematical ones; for example, there are puzzling paradoxes that arise over mathematical terms but disappear when the restatement is made in the most basic logical terms. It is always a gain to move from a relatively unclear to a relatively clear way of stating things.

3. *Certainty*. Here the point is not that statements in logical terms are in general more immediately certain than those in arithmetical terms. (It would be difficult to find something more evident than "2 plus 2 equals 4.") Russell came to see that the reduction did not really achieve his original objective of finding "some reason to believe in the truth of mathematics." "When pure mathematics is organized as a deductive system . . . it becomes obvious that, if we are to believe in the truth of pure mathematics, it cannot be solely because we believe in the truth of the set of premises. Some of the premises are much less obvious than some of their consequences."⁴ The gain in certainty has to do with the sorts of entities assumed. Russell felt that in its traditional

formulation mathematics assumed the existence of various entities, such as numbers and infinite classes, the existence of which, since it could not be supported by experience, was dubious. In the logical formulation, as he conceived it, these assumptions were not made, and so a basis for doubt was removed. (Just what sorts of entities are assumed in the more basic formulation, and just how certain their existence is, is less clear here than in certain other reductions we shall be considering.)

Russell soon saw that the technique of contextual definition could be applied to philosophical problems outside mathematics. There are many other areas in which we believe in entities, the existence of which are not certain by Russell's somewhat refined standards, and in which Russell thought that our ways of talking gave rise to baffling puzzles, for example, universals, physical objects, and the ego. Now just as no one suspected that numbers could be defined by logical terms before the techniques of the new logic were turned on them, so in these cases we might be able to show that statements about these entities can be translated into statements about more certain, less puzzling entities. Thus Russell sought to reduce physical objects to immediate data of sensation,⁵ and the ego to images and sensations.⁶ In all such cases, to say that *x* is reduced to *y* (or, what comes to the same for Russell, to say that *x* is *constructed out of y*) is to say that schema are provided for translating statements about *x* into statements about *y*. And the point in all these cases is the replacement of entities that have been inferred by more or less dubious arguments, with "logical constructions" out of entities that are clearer and less uncertain. The maxim of this procedure is: "Wherever possible, substitute constructions out of known entities for inferences to unknown entities."

However, logical constructionism does not suffice to constitute logical atomism. The technique of logical constructionism is one which can be employed in the service of a great variety of philosophical viewpoints. One can seek to construct physical objects out of sense data, or, alternatively, out of monads, ideas in the mind of God, or regular solids. One can seek to construct mental acts (thinking, deciding, wishing) out of responses of muscles and glands, nerve currents, faculties of the soul, or sensations. And one can simply use the technique *ad hoc* for the solution of various particular problems without being guided by any over-all philosophical viewpoint. Logical atomism is a comprehensive philosophical viewpoint resulting from restricting in certain ways the termini, and hence the direction, of logical analysis. The restrictions concern both (1) the logical form and (2) the concrete filling of the termini of analysis.

1. Looked at in one way, logical atomism is the working out of the assumption that the logic of *Principia Mathematica* provides the skeleton of an ideal language. In such a language the simplest form of statement* is that in which we have a predicate and one or more designative terms, the whole statement asserting the entity designated has the property indicated by the predicate, or that the entities designated are related by the relation indicated by the predicate. ("This is red," "This above that.") Now in the strictest form of logical atomism, exemplified by Ludwig Wittgenstein's *Tractatus Logico-Philosophicus*,⁷ it is held that all other statements are truth functions of atomic statements, that is,

* Only statements are accorded much attention by logical atomists. How requests, promises, or exhortations would be made in their ideal language, they do not say.

that they are made up of atomic statements in such a way that their truth or falsity is a definite function of the truth or falsity of the constituents just as the truth or falsity of the conjunction, "This is red and that is round" is determined by the truth status of "This is red" and of "That is round." Russell was never a good party man, and he had reservations about both general statements and statements about cognitive states like belief and perception (see Lectures IV and V; for the struggles Wittgenstein went through in order to avoid these exceptions, see *Tractatus*, 5.521–5.525; 5.541–5.542). But even in Russell's form logical atomism was committed to the attempt to construe as many statements as possible as truth functions of atomic statements, the point being that this provided a clear and unproblematic way of exhibiting the structure of complex statements.

2. But the specification of the logical form still leaves open what names or predicates can be inserted. "God is omnipotent," "Socrates was the master of Plato," "Dobbin is grey," "Bertrand Russell is a logical atomist," all equally satisfy the purely formal requirement. But Russell would regard none of these sentences as really atomic. He employed a further criterion of admissibility, which was formulated as follows (under the heading "Principle of Acquaintance"): "Every proposition which we can understand must be composed wholly of constituents with which we are acquainted."⁸ This was meant to give an empiricist direction to the theory. It reflected the conviction that all knowledge is based on experience, so that to replace unknown entities with constructions out of known entities is to get back to entities of which we have direct experience. In this aspect logical atomism is a continuation of the British empirical tradition. It differs from past forms precisely in seeking not to *infer* other entities from the data of experience, but rather to render such inferences needless by showing that the supposed other entities are nothing but complexes of experienced data.

This clearly rules out "God is omnipotent" (provided we can distinguish religious experience from the sort that is in question here), and also "Russell is a logical atomist," on the grounds that being a logical atomist is not a property of whose presence we can be directly aware. What about "Dobbin is grey"? To see what is wrong with that we have to make explicit the fact that Russell's empiricism is in the phenomenalist tradition of Hume and Mill. Although there are empiricists who suppose that we directly experience houses, stones, trees, and people and are perfectly content to take these as ultimate data, the more critical empiricism of the Hume-Mill school finds the existence of physical objects dubious,* and is constrained to look deeper for directly (infallibly) experienced items. They find such items in sense data, such as a particular smell, noise, or patch of color. It is only names of sense data, then, which will be allowed in the atomic sentences of the ideal language, together with predicates signifying properties of sense data or relations between them. And then the program will be to show how everything we want to say about the world can be expressed in terms of combinations (preferably truth-functional) of such sentences.

So far I have presented logical atomism as an attempt to effect linguistic

* There are various reasons for this. For example, I *might* be having a hallucination on any given occasion when I suppose myself to be seeing a horse, in which case there is really no horse there.

transformations of a certain sort, for predominantly logical and epistemological motives. And it certainly is that. But there is also a metaphysical side to it. Long before Russell gets to his eighth lecture, "Excursus into Metaphysics: What There Is," he is making inferences from his logical doctrines to the metaphysical structure of the world. Behind these inferences is another fundamental principle of logical atomism, that in a logically perfect language there would be an identity of structure between a true proposition and the fact that it asserted. Thus Russell lays it down, "That the components of the fact which makes a proposition true or false, as the case may be, are the *meanings* of the symbols which we must understand in order to understand the proposition."⁹ Wittgenstein in the *Tractatus* makes this point by saying that a proposition can represent a state of affairs only by *picturing* it,¹⁰ though it is not at all clear what he means by *picturing*.

If this is the case, we can draw inferences from the structure of the basic true atomic propositions to the structure of the ultimate atomic facts that make them true, and the constituents of these facts will then be the ultimate constituents of the universe. Thus the claim that Russell's language is an ideal language carries with it the claim that the ultimate constituents of the universe are sense data and immediately discernible properties of and relations between sense data plus some distinctive sorts of mental entities, the exact nature of which is not made clear.

Then what of the "incomplete symbols" to be eliminated by the reduction to atomic propositions, for example, words purportedly designating physical objects, persons, and numbers? What does Russell want to say about their metaphysical correlates or the lack thereof? In other words, what is the metaphysical correlate of the logical statement that physical objects are logical constructions out of sense data or that properties are logical constructions out of classes of similar individuals? What metaphysical status, if any, does this give physical objects and properties? There seems to be a strain in the Russellian philosophy at this point. At times Russell talks as if what we have here is a simple straightforward problem as to what does and does not exist, and that by reducing chairs to sense data he has shown not that chairs do not exist, that would be too strong a claim, but at least that we need not assume that they do, that we can say everything we want to say without saddling ourselves with that assumption. "In that way the desk is reduced to being a logical fiction, because a series is a logical fiction. In that way all the ordinary objects of daily life are extruded from the world of what there is, and in their place as what there is you find a number of passing particulars of the kind that one is immediately conscious of in sense. I want to make clear that I am not *denying* the existence; I am only refusing to affirm it."¹¹ When writing in this vein, Russell gives the impression that the main value he attaches to his method is the way it enables us to reduce the number of kinds of things we assume to exist, and thereby reduces the risk of error.

But when the theory of types is in the foreground, Russell presents the enterprise in a different light. This theory, one of Russell's most important contributions to logic, segregates expressions into types such that the substitution of one expression for another in a larger expression can be made only if both expressions are of the same type; otherwise the result will not be meaningful

(for a summary of the problems that drove Russell to insist on this restriction, see Lecture VII). On this approach, terms for classes are always of a different type from terms for their members. And if we remember that according to Russell the sorts of entities he is treating as logical constructions generally turn out to be classes of one sort or another, we can see that a term designating this chair, for example, will be of a different logical type from a term designating any of the atomic particulars that are the ultimate constituents of such classes. Hence we cannot substitute "chairs" for "sense data" and get a significant proposition. This leads Russell to call the supposition that there are classes, in the same sense of "there are" in which there are sense data, not false, but meaningless. "There are particulars, but when one comes on to classes, and classes of classes, and classes of classes of classes, one is talking of logical fictions. When I say there are no such things, that again is not correct. It is not significant to say "There are such things," in the same sense of the words "there are" in which you can say "There are particulars." But there is another side to the coin. "If I say 'There are particulars' and 'There are classes,' the two phrases 'there are' will have to have different meanings in those two propositions, and if they have suitable different meanings, both propositions may be true."¹²

If the theory of types is applied in this way, it knocks the props from under the previous metaphysical interpretation of logical constructions. Recall that on that interpretation the "reduction" of physical objects to sense data enables us to sidestep the question of the existence of physical objects—enables us to carry on our business, theoretical as well as practical, without making any assumption on that point. But, given the above application of the theory of types, it is impossible that the reduction could have any such import. If in saying "There are physical objects," we are using "there are" in the sense in which there are sense data, then we are talking nonsense; there is no question at all, open or closed. On the other hand, if we are using "there are" in a sense appropriate to physical-object types of expressions, then what we are saying is presumably true; and in any event the translation of physical-object statements into sense-data statements could do nothing to show that the existence of physical objects can be left undecided, in that sense of existence. We can represent the problem as a straightforward problem as to what there is only so long as we suppose that a single sense of "there is" is applicable to entities of all sorts. From this second angle the metaphysical significance of the reduction lies precisely in its revelation of the difference between the modes of existence of physical objects and sense data, in showing that whereas the latter exists in a fundamental way, the former have only a derivative sort of being. Thus Russell will sometimes put his position in the form of a denial that physical objects are among the "ultimate constituents of the universe."

But just what is the difference between the sort of existence physical objects have, and the sort of existence which sense data have? In Lecture VII, Russell raises this question with respect to classes, and his answer simply consists of showing, in outline, how sentences containing class terms are to be translated into sentences containing no class terms. This seems to mean that to say that classes have a derivative mode of existence is simply to say that sentences containing class terms can be translated into sentences containing no such terms;

that is, it is to say that terms of that type are eliminable. But if this is so, then the metaphysical import is nil; it is just a garnish that adds nothing to the substance of the position. "Classes have a derivative mode of being" is just a pretentious restatement of "Class words are eliminable," and nothing more. Russell himself suggests such a conclusion when he says "All those statements are about symbols. They are never about the things themselves. . . ." But, as we have seen, he is very far from consistently carrying it out. It would seem that Russell will have to give up, or radically reconceive, the theory of types, or else frankly abandon any metaphysical pretensions. The latter course is taken by the much more extreme *Tractatus*, although Wittgenstein does so in a characteristically paradoxical way. After setting out logical atomism in much more explicitly metaphysical terms than those used by Russell, he argues, on grounds somewhat akin to the theory of types, that one cannot say anything about the relation of language to reality (which is what metaphysics comes down to in logical atomism). This can only be *shown* in language, not *said* by it.¹³ Then what has Wittgenstein been doing all through the book? Such answer as we have to this question is contained in the cryptic conclusion to the book. "My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.) He must surmount these propositions; then he sees the world rightly. Whereof one cannot speak, thereof one must be silent."¹⁴ Such mystification did not appeal to Russell, but it is difficult to see what alternative he has.

According to C. D. Broad, "As we all know, Mr. Russell produces a different system of philosophy every few years. . . ." At best this is an oversimplification; as pointed out above, Russell has remained a more or less empiricistic constructionist throughout his career. But it is true that Russell has never hesitated to publicly change his mind on particular points. However, although Russell has not often used the label "Logical Atomism" since the twenties, I do not believe that the philosophy expressed in his major works of the forties, *An Inquiry into Meaning and Truth* and *Human Knowledge*, is vastly different from that contained in the present selection. The major differences are the following.

First, "neutral monism," with which he carried on an unsuccessful flirtation in the present work, was largely accepted from the *Analysis of Mind* (1921). At least from that time Russell gave up any dualism of mental acts and their objects, and took as his sole ultimate particulars sense data and entities of not radically dissimilar kinds, namely, unsensed sense data and images. This differs from a more extreme neutral monism only in retaining images as a kind of entity that is peculiarly mental.

Second, the particular-universal distinction has undergone a radical shift. Dismayed by the unempirical and paradoxical character of the notion of an ultimate substratum of qualities (Locke's "I-know-not-what which underlies qualities"), Russell has proposed to take sensed qualities, and bundles thereof, as the referents of proper names. On this new theory, "This is red" will be analyzed not so that "this" refers to a sense datum that "has" qualities like redness, but rather as "Red is a member of this," where "this" refers to a compresent group of sensed qualities (for example, red, round, in the middle of

the visual field, having ragged edges). In this interpretation both "red" and "this" are proper names of qualities or complexes of qualities.

But although Russell remained faithful to the basic tenets of logical atomism, the same cannot be said of his former comrades, particularly Wittgenstein and John Wisdom. For that story see Part IX.

W. P. A.

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The Philosophy of Logical Atomism

by **B E R T R A N D R U S S E L L**

[THE FOLLOWING ARTICLES (CONSIST) . . . OF A COURSE OF EIGHT LECTURES DELIVERED IN LONDON IN THE FIRST MONTHS OF 1918, AND ARE VERY LARGELY CONCERNED WITH EXPLAINING CERTAIN IDEAS WHICH I LEARNED FROM MY FRIEND AND FORMER PUPIL LUDWIG WITTGENSTEIN. I HAVE HAD NO OPPORTUNITY OF KNOWING HIS VIEWS SINCE AUGUST, 1914, AND I DO NOT EVEN KNOW WHETHER HE IS ALIVE OR DEAD. HE HAS THEREFORE NO RESPONSIBILITY FOR WHAT IS SAID IN THESE LECTURES BEYOND THAT OF HAVING ORIGINALLY SUPPLIED MANY OF THE THEORIES CONTAINED IN THEM. . . . —B. R. (1918)]

I. FACTS AND PROPOSITIONS

This course of lectures which I am now beginning I have called the Philosophy of Logical Atomism. Perhaps I had better begin by saying a word or two as to what I understand by that title. The kind of philosophy that I wish to advocate, which I call Logical Atomism, is one which has forced itself upon me in the course of thinking about the philosophy of mathematics, although I should find it hard to say exactly how far there is a definite logical connection between the two. The things I am going to say in these lectures are mainly my own personal opinions and I do not claim that they are more than that.

As I have attempted to prove in *The Principles of Mathematics*, when we analyze mathematics we bring it all back to logic. It all comes back to logic in the strictest and most formal sense. In the present lectures, I shall try to set forth in a sort of outline, rather briefly and rather unsatisfactorily, a kind of logical doctrine which seems to me to result from the philosophy of mathematics—not exactly logically, but as what emerges as one reflects: a certain kind of logical doctrine, and on the basis of this a certain kind of metaphysic. The logic which I shall advocate is atomistic, as opposed to the monistic logic of the people who more or less follow Hegel. When I say that my logic is atomistic, I mean that I share the common-sense belief that there are many separate things; I do not regard the apparent multiplicity of the world as consisting merely in phases and unreal divisions of a single indivisible Reality. It results from that, that a considerable part of what one would have to do to justify the sort of philosophy I wish to advocate would consist in justifying the process of analysis. One is often told

that the process of analysis is falsification, that when you analyze any given concrete whole you falsify it and that the results of analysis are not true. I do not think that is a right view. I do not mean to say, of course, and nobody would maintain, that when you have analyzed you keep everything that you had before you analyzed. If you did, you would never attain anything in analyzing. I do not propose to meet the views that I disagree with by controversy, by arguing against those views, but rather by positively setting forth what I believe to be the truth about the matter, and endeavoring all the way through to make the views that I advocate result inevitably from absolutely undeniable data. When I talk of "undeniable data" that is not to be regarded as synonymous with "true data," because "undeniable" is a psychological term and "true" is not. When I say that something is "undeniable," I mean that it is not the sort of thing that anybody is going to deny; it does not follow from that it is true though it does follow that we shall all think it true—and that is as near to truth as we seem able to get. When you are considering any sort of theory of knowledge, you are more or less tied to a certain unavoidable subjectivity, because you are not concerned simply with the question what is true of the world, but "What can I know of the world?" you always have to start any kind of argument from something which appears to you to be true; if it appears to you to be true, there is no more to be done. You cannot go outside yourself and consider abstractly whether the things that appear to you to be true are true; you may do this in a particular case, where one of your beliefs is changed in consequence of others among your beliefs.

The reason that I call my doctrine *logical atomism* is because the atoms that I wish to arrive at as the sort of last residue in analysis are logical atoms and not physical atoms. Some of them will be what I call "particulars"—such things as little patches of color or sounds, momentary things—and some of them will be predicates or relations and so on. The point is that the atom I wish to arrive at is the atom of logical analysis, not the atom of physical analysis.

It is a rather curious fact in philosophy that the data which are undeniable to start with are always rather vague and ambiguous. You can, for instance, say: "There are a number of people in this room at this moment." That is obviously in some sense undeniable. But when you come to try and define what this room is, and what it is for a person to be in a room, and how you are going to distinguish one person from another, and so forth, you find that what you have said is most fearfully vague and that you really do not know what you meant. That is a rather singular fact, that everything you are really sure of, right off is something that you do not know the meaning of, and the moment you get a precise statement you will not be sure whether it is true or false, at least right off. The process of sound philosophizing, to my mind, consists mainly in passing from those obvious, vague, ambiguous things, that we feel quite sure of, to something

precise, clear, definite, which by reflection and analysis we find is involved in the vague thing that we start from, and is, so to speak, the real truth of which that vague thing is a sort of shadow. I should like, if time were longer and if I knew more than I do, to spend a whole lecture on the conception of vagueness. I think vagueness is very much more important in the theory of knowledge than you would judge it to be from the writings of most people. Everything is vague to a degree you do not realize till you have tried to make it precise, and everything precise is so remote from everything that we normally think, that you cannot for a moment suppose that is what we really mean when we say what we think.

When you pass from the vague to the precise by the method of analysis and reflection that I am speaking of, you always run a certain risk of error. If I start with the statement that there are so and so many people in this room, and then set to work to make that statement precise, I shall run a great many risks and it will be extremely likely that any precise statement I make will be something not true at all. So you cannot very easily or simply get from these vague undeniable things to precise things which are going to retain the undeniability of the starting-point. The precise propositions that you arrive at may be *logically* premises to the system that you build up upon the basis of them, but they are not premises for the theory of knowledge. It is important to realize the difference between that from which your knowledge is, in fact, derived, and that from which, if you already had complete knowledge, you would deduce it. Those are quite different things. The sort of premise that a logician will take for a science will not be the sort of thing which is first known or easiest known: it will be a proposition having great deductive power, great cogency and exactitude, quite a different thing from the actual premise that your knowledge started from. When you are talking of the premise for theory of knowledge, you are not talking of anything objective, but of something that will vary from man to man, because the premises of one man's theory of knowledge will not be the same as those of another man's. There is a great tendency among a very large school to suppose that when you are trying to philosophize about what you know, you ought to carry back your premises further and further into the region of the inexact and vague, beyond the point where you yourself are, right back to the child or monkey, and that anything whatsoever that *you* seem to know—but that the psychologist recognizes as being the product of previous thought and analysis and reflection on your part—cannot really be taken as a premise in your own knowledge. That, I say, is a theory which is very widely held and which is used against that kind of analytic outlook which I wish to urge. It seems to me that when your object is, not simply to study the history or development of mind, but to ascertain the nature of the world, you do not want to go any further back than you are already yourself. You do not want to go back to the vagueness of the child or monkey, because you will find that quite sufficient

difficulty is raised by your own vagueness. But there one is confronted by one of those difficulties that occur constantly in philosophy, where you have two ultimate prejudices conflicting and where argument ceases. There is the type of mind which considers that what is called primitive experience must be a better guide to wisdom than the experience of reflective persons, and there is the type of mind which takes exactly the opposite view. On that point I cannot see any argument whatsoever. It is quite clear that a highly educated person sees, hears, feels, does everything in a very different way from a young child or animal, and that this whole manner of experiencing the world and of thinking about the world is very much more analytic than that of a more primitive experience. The things we have got to take as premises in any kind of work of analysis are the things which appear to *us* undeniable—to us here and now, as we are—and I think on the whole that the sort of method adopted by Descartes is right: that you should set to work to doubt things and retain only what you cannot doubt because of its clearness and distinctness, not because you are sure not to be induced into error, for there does not exist a method which will safeguard you against the possibility of error. The wish for perfect security is one of those snares we are always falling into, and is just as untenable in the realm of knowledge as in everything else. Nevertheless, granting all this, I think that Descartes's method is on the whole a sound one for the starting-point.

I propose, therefore, always to begin any argument that I have to make by appealing to data which will be quite ludicrously obvious. Any philosophical skill that is required will consist in the selection of those which are capable of yielding a good deal of reflection and analysis, and in the reflection and analysis themselves.

What I have said so far is by way of introduction.

The first truism to which I wish to draw your attention—and I hope you will agree with me that these things that I call truisms are so obvious that it is almost laughable to mention them—is that the world contains facts, which are what they are whatever we may choose to think about them and that there are also beliefs, which have reference to facts, and by reference to facts are either true or false. I will try first of all to give you a preliminary explanation of what I mean by a "fact." When I speak of a fact—I do not propose to attempt an exact definition, but an explanation, so that you will know what I am talking about—I mean the kind of thing that makes a proposition true or false. If I say "It is raining," what I say is true in a certain condition of weather and is false in other conditions of weather. The condition of weather that makes my statement true (or false as the case may be), is what I should call a "fact." If I say "Socrates is dead," my statement will be true owing to a certain physiological occurrence which happened in Athens long ago. If I say, "Gravitation varies inversely as the square of the distance," my statement is rendered true by astronomical fact. If I say, "Two and two are four," it is arithmetical fact that makes my statement

true. On the other hand, if I say "Socrates is alive" or "Gravitation varies directly as the distance," or "Two and two are five," the very same facts which made my previous statements true show that these new statements are false.

I want you to realize that when I speak of a fact I do not mean a particular existing thing, such as Socrates or the rain or the sun. Socrates himself does not render any statement true or false. You might be inclined to suppose that all by himself he would give truth to the statement "Socrates existed," but as a matter of fact that is a mistake. It is due to a confusion which I shall try to explain in the sixth lecture of this course, when I come to deal with the notion of existence. Socrates¹ himself, or any particular thing just by itself, does not make any proposition true or false. "Socrates is dead" and "Socrates is alive" are both of them statements about Socrates. One is true and the other false. What I call a fact is the sort of thing that is expressed by a whole sentence, not by a single name like "Socrates." When a single word does come to express a fact, like "fire" or "wolf," it is always due to an unexpressed context, and the full expression of a fact will always involve a sentence. We express a fact, for example, when we say that a certain thing has a certain property, or that it has a certain relation to another thing; but the thing which has the property or the relation is not what I call a "fact."

It is important to observe that facts belong to the objective world. They are not created by our thoughts or beliefs except in special cases. That is one of the sort of things which I should set up as an obvious truism, but, of course, one is aware, the moment one has read any philosophy at all, how very much there is to be said before such a statement as that can become the kind of position that you want. The first thing I want to emphasize is that the outer world—the world, so to speak, which knowledge is aiming at knowing—is not completely described by a lot of "particulars," but that you must also take account of these things that I call facts, which are the sort of things that you express by a sentence, and that these, just as much as particular chairs and tables, are part of the real world. Except in psychology, most of our statements are not intended merely to express our condition of mind, though that is often all that they succeed in doing. They are intended to express facts, which (except when they are psychological facts) will be about the outer world. There are such facts involved, equally when we speak truly and when we speak falsely. When we speak falsely it is an objective fact that makes what we say false, and it is an objective fact which makes what we say true when we speak truly.

There are a great many different kinds of facts, and we shall be concerned in later lectures with a certain amount of classification of facts. I will just point out a few kinds of facts to begin with, so that you may not

1. I am here for the moment treating Socrates as a "particular." But we shall see shortly that this view requires modification.

imagine that facts are all very much alike. There are particular facts, such as "This is white"; then there are general facts, such as "All men are mortal." Of course, the distinction between particular and general facts is one of the most important. There again it would be a very great mistake to suppose that you could describe the world completely by means of particular facts alone. Suppose that you had succeeded in chronicling every single particular fact throughout the universe, and that there did not exist a single particular fact of any sort anywhere that you had not chronicled, you still would not have got a complete description of the universe unless you also added: "These that I have chronicled are all the particular facts there are." So you cannot hope to describe the world completely without having general facts as well as particular facts. Another distinction, which is perhaps a little more difficult to make, is between positive facts and negative facts, such as "Socrates was alive"—a positive fact, and "Socrates is not alive"—you might say a negative fact.* But the distinction is difficult to make precise. Then there are facts concerning particular things or particular qualities or relations, and, apart from them, the completely general facts of the sort that you have in logic, where there is no mention of any constituent whatever of the actual world, no mention of any particular thing or particular quality or particular relation, indeed strictly you may say no mention of anything. That is one of the characteristics of logical propositions, that they mention nothing. Such a proposition is: "If one class is part of another, a term which is a member of the one is also a member of the other." All those words that come in the statement of a pure logical proposition are words really belonging to syntax. They are words merely expressing form or connection, not mentioning any particular constituent of the proposition in which they occur. This is, of course, a thing that wants to be proved; I am not laying it down as self-evident. Then there are facts about the properties of single things; and facts about the relations between two things, three things, and so on; any number of different classifications of some of the facts in the world, which are important for different purposes.

It is obvious that there is not a dualism of true and false facts; there are only just facts. It would be a mistake, of course, to say that all facts are true. That would be a mistake because true and false are correlatives, and you would only say of a thing that it was true if it was the sort of thing that *might* be false. A fact cannot be either true or false. That brings us on to the question of statements or propositions or judgements, all those things that do have the duality of truth and falsehood. For the purposes of logic, though not, I think, for the purposes of theory of knowledge, it is natural to concentrate upon the proposition as the thing which is going to be our typical vehicle on the duality of truth and falsehood. A proposition, one may say, is a sentence in the indicative, a sentence asserting something, not questioning or commanding or wishing. It may also be a sentence of that sort pre-

* Negative facts are further discussed in a later lecture.

ceded by the word "that." For example, "That Socrates is alive," "That two and two are four," "That two and two are five," anything of that sort will be a proposition.

A proposition is just a symbol. It is a complex symbol in the sense that it has parts which are also symbols: a symbol may be defined as complex when it has parts that are symbols. In a sentence containing several words, the several words are each symbols, and the sentence composing them is therefore a complex symbol in that sense. There is a good deal of importance to philosophy in the theory of symbolism, a good deal more than at one time I thought. I think the importance is almost entirely negative, i.e., the importance lies in the fact that unless you are fairly self-conscious about symbols, unless you are fairly aware of the relation of the symbol to what it symbolizes, you will find yourself attributing to the thing properties which only belong to the symbol. That, of course, is especially likely in very abstract studies such as philosophical logic, because the subject-matter that you are supposed to be thinking of is so exceedingly difficult and elusive that any person who has ever tried to think about it knows you do not think about it except perhaps once in six months for half a minute. The rest of the time you think about the symbols, because they are tangible but the thing you are supposed to be thinking about is fearfully difficult and one does not often manage to think about it. The really good philosopher is the one who does once in six months think about it for a minute. Bad philosophers never do. That is why the theory of symbolism has a certain importance, because otherwise you are so certain to mistake the properties of the symbolism for the properties of the thing. It has other interesting sides to it too. There are different kinds of symbols, different kinds of relation between symbol and what is symbolized, and very important fallacies arise from not realizing this. The sort of contradictions about which I shall be speaking in connection with types in a later lecture all arise from mistakes in symbolism, from putting one sort of symbol in the place where another sort of symbol ought to be. Some of the notions that have been thought absolutely fundamental in philosophy have arisen, I believe, entirely through mistakes as to symbolism—e.g., the notion of existence, or, if you like, reality. Those two words stand for a great deal that has been discussed in philosophy. There has been the theory about every proposition being really a description of reality as a whole and so on, and altogether these notions of reality and existence have played a very prominent part in philosophy. Now my own belief is that as they have occurred in philosophy, they have been entirely the outcome of a muddle about symbolism, and that when you have cleared up that muddle, you find that practically everything that has been said about existence is sheer and simple mistake, and that is all you can say about it. I shall go into that in a later lecture, but it is an example of the way in which symbolism is important.

Perhaps I ought to say a word or two about what I am understanding by

symbolism, because I think some people think you only mean mathematical symbols when you talk about symbolism. I am using it in a sense to include all language of every sort and kind, so that every word is a symbol, and every sentence, and so forth. When I speak of a symbol I simply mean something that "means" something else, and as to what I mean by "meaning" I am not prepared to tell you. I will in the course of time enumerate a strictly infinite number of different things that "meaning" may mean, but I shall not consider that I have exhausted the discussion by doing that. I think that the notion of meaning is always more or less psychological, and that it is not possible to get a pure logical theory of meaning, nor therefore of symbolism. I think that it is of the very essence of the explanation of what you mean by a symbol to take account of such things as knowing, of cognitive relations, and probably also of association. At any rate I am pretty clear that the theory of symbolism and the use of symbolism is not a thing that can be explained in pure logic without taking account of the various cognitive relations that you may have to things.

As to what one means by "meaning," I will give a few illustrations. For instance, the word "Socrates," you will say, means a certain man; the word "mortal" means a certain quality; and the sentence "Socrates is mortal" means a certain fact. But these three sorts of meaning are entirely distinct, and you will get into the most hopeless contradictions if you think the word "meaning" has the same meaning in each of these three cases. It is very important not to suppose that there is just one thing which is meant by "meaning," and that therefore there is just one sort of relation of the symbol to what is symbolized. A name would be a proper symbol to use for a person; a sentence (or a proposition) is the proper symbol for a fact.

A belief or a statement has duality of truth and falsehood, which the fact does not have. A belief or a statement always involves a proposition. You say that a man believes that so and so is the case. A man believes that Socrates is dead. What he believes is a proposition on the face of it, and for formal purposes it is convenient to take the proposition as the essential thing having the duality of truth and falsehood. It is very important to realize such things, for instance, as that propositions are not names for facts. It is quite obvious as soon as it is pointed out to you, but as a matter of fact I never had realized it until it was pointed out to me by a former pupil of mine, Wittgenstein. It is perfectly evident as soon as you think of it, that a proposition is not a name for a fact, from the mere circumstance that there are *two* propositions corresponding to each fact. Suppose it is a fact that Socrates is dead. You have two propositions: "Socrates is dead" and "Socrates is not dead." And those two propositions corresponding to the same fact, there is one fact in the world which makes one true and one false. That is not accidental, and illustrates how the relation of proposition to fact is a totally different one from the relation of name to the thing named. For each fact there are two propositions, one true and

one false, and there is nothing in the nature of the symbol to show us which is the true one and which is the false one. If there were, you could ascertain the truth about the world by examining propositions without looking around you.

There are two different relations, as you see, that a proposition may have to a fact: the one the relation that you may call being true to the fact, and the other being false to the fact. Both are equally essentially logical relations which may subsist between the two, whereas in the case of a name, there is only one relation that it can have to what it names. A name can just name a particular, or, if it does not, it is not a name at all, it is a noise. It cannot be a name without having just that one particular relation of naming a certain thing, whereas a proposition does not cease to be a proposition if it is false. It has these two ways, of being true and being false, which together correspond to the property of being a name. Just as a word may be a name or be not a name but just a meaningless noise, so a phrase which is apparently a proposition may be either true or false, or may be meaningless, but the true and false belong together as against the meaningless. That shows, of course, that the formal logical characteristics of propositions are quite different from those of names, and that the relations they have to facts are quite different, and therefore propositions are not names for facts. You must not run away with the idea that you can name facts in any other way; you cannot. You cannot name them at all. You cannot properly name a fact. The only thing you can do is to assert it, or deny it, or desire it, or will it, or wish it, or question it, but all those are things involving the whole proposition. You can never put the sort of thing that makes a proposition to be true or false in the position of a logical subject. You can only have it there as something to be asserted or denied or something of that sort, but not something to be named.

¶ Discussion

—: Do you take your starting-point “That there are many things” as a postulate which is to be carried along all through, or has to be proved afterward?

Mr. Russell: No, neither the one nor the other. I do not take it as a postulate that “There are many things.” I should take it that, in so far as it can be proved, the proof is empirical, and that the disproofs that have been offered are *a priori*. The empirical person would naturally say, there are many things. The monistic philosopher attempts to show that there are not. I should propose to refute his *a priori* arguments. I do not consider there is any *logical* necessity for there to be many things, nor for there not to be many things.

—: I mean in making a start, whether you start with the empirical or

the *a priori* philosophy, do you make your statement just at the beginning and come back to prove it, or do you never come back to prove it, or do you never come back to the proof of it?

Mr. Russell: No, you never come back. It is like the acorn to the oak. You never get back to the acorn in the oak. I should like a statement which would be rough and vague and have that sort of obviousness that belongs to things of which you never know what they mean, but I should never get back to that statement. I should say, here is a thing. We seem somehow convinced that there is truth buried in this thing somewhere. We will look at it inside and out until we have extracted something and can say, now that is true. It will not really be the same as the thing we started from because it will be so much more analytic and precise.

—: Does it not look as though you could name a fact by a date?

Mr. Russell: You can apparently name facts, but I do not think you can really: you would always find that if you set out the whole thing fully, it was not so. Suppose you say "The death of Socrates." You might say, that is a name for the fact that Socrates died. But it obviously is not. You can see that the moment you take account of truth and falsehood. Supposing he had not died, the phrase would still be just as significant although there could not be then anything you could name. But supposing he had never lived, the sound "Socrates" would not be a name at all. You can see it in another way. You can say "The death of Socrates is a fiction." Suppose you had read in the paper that the Kaiser had been assassinated, and it turned out to be not true. You could then say, "The death of the Kaiser is a fiction." It is clear that there is no such thing in the world as a fiction, and yet that statement is a perfectly sound statement. From this it follows that "The death of the Kaiser" is not a name.

II. PARTICULARS, PREDICATES, AND RELATIONS

I propose to begin to-day the analysis of facts and propositions, for in a way the chief thesis that I have to maintain is the legitimacy of analysis, because if one goes into what I call Logical Atomism that means that one does believe the world can be analyzed into a number of separate things with relations and so forth, and that the sort of arguments that many philosophers use against analysis are not justifiable.

In a philosophy of logical atomism one might suppose that the first thing to do would be to discover the kinds of atoms out of which logical structures are composed. But I do not think that is quite the first thing; it is one of the early things, but not quite the first. There are two other questions that one has to consider, and one of these at least is prior. You have to consider:

1. Are the things that look like logically complex entities really complex?
2. Are they really entities?

The second question we can put off; in fact, I shall not deal with it fully until my last lecture. The first question, whether they are really complex, is one that you have to consider at the start. Neither of these questions is, as it stands, a very precise question. I do not pretend to start with precise questions. I do not think you can start with anything precise. You have to achieve such precision as you can, as you go along. Each of these two questions, however, is *capable* of a precise meaning, and each is really important.

There is another question which comes still earlier, namely: what shall we take as *prima facie* examples of logically complex entities? That really is the first question of all to start with. What sort of things shall we regard as *prima facie* complex?

Of course, all the ordinary objects of daily life are apparently complex entities: such things as tables and chairs, loaves and fishes, persons and principalities and powers—they are all on the face of it complex entities: Socrates, Piccadilly, Rumania, Twelfth Night or anything you like to think of, to which you give a proper name, they are all apparently complex entities. They seem to be complex systems bound together into some kind of a unity, that sort of a unity that leads to the bestowal of a single appellation. I think it is the contemplation of this sort of apparent unity which has very largely led to the philosophy of monism, and to the suggestion that the universe as a whole is a single complex entity more or less in the sense in which these things are that I have been talking about.

For my part, I do not believe in complex entities of this kind, and it is not such things as these that I am going to take as the *prima facie* examples of complex entities. My reasons will appear more and more plainly as I go on. I cannot give them all to-day, but I can more or less explain what I mean in a preliminary way. Suppose, for example, that you were to analyze what appears to be a fact about Piccadilly. Suppose you made any statement about Piccadilly, such as: "Piccadilly is a pleasant street." If you analyze a statement of that sort correctly, I believe you will find that the fact corresponding to your statement does not contain any constituent corresponding to the word "Piccadilly." The word "Piccadilly" will form part of many significant propositions, but the facts corresponding to these propositions do not contain any single constituent, whether simple or complex, corresponding to the word "Piccadilly." That is to say, if you take language as a guide in your analysis of the fact expressed, you will be led astray in a statement of that sort. The reasons for that I shall give at length in Lecture VI, and partly also in Lecture VII, but I could say in a preliminary way certain things that would make you understand what I mean. "Piccadilly," on the face of it, is the name for a certain portion of the earth's surface, and I sup-

pose, if you wanted to define it, you would have to define it as a series of classes of material entities, namely those which, at varying times, occupy that portion of the earth's surface. So that you would find that the logical status of Piccadilly is bound up with the logical status of series and classes, and if you are going to hold Piccadilly as real, you must hold that series of classes are real, and whatever sort of metaphysical status you assign to them you must assign to it. As you know, I believe that series and classes are of the nature of logical fictions: therefore that thesis, if it can be maintained, will dissolve Piccadilly into a fiction. Exactly similar remarks will apply to other instances: Rumania, Twelfth Night, and Socrates. Socrates, perhaps, raises some special questions, because the question what constitutes a person has special difficulties in it. But, for the sake of argument, one might identify Socrates with the series of his experiences. He would be really a series of classes, because one has many experiences simultaneously. Therefore he comes to be very like Piccadilly.

Considerations of that sort seem to take us away from such *prima facie* complex entities as we started with to others as being more stubborn and more deserving of analytic attention, namely facts. I explained last time what I meant by a fact, namely, that sort of thing that makes a proposition true or false, the sort of thing which is the case when your statement is true and is not the case when your statement is false. Facts are, as I said last time, plainly something you have to take account of if you are going to give a complete account of the world. You cannot do that by merely enumerating the particular things that are in it: you must also mention the relations of these things, and their properties, and so forth, all of which are facts, so that facts certainly belong to an account of the objective world, and facts do seem much more clearly complex and much more not capable of being explained away than things like Socrates and Rumania. However you may explain away the meaning of the word "Socrates," you will still be left with the truth that the proposition "Socrates is mortal" expresses a fact. You may not know exactly what Socrates means, but it is quite clear that "Socrates is mortal" does express a fact. There is clearly some valid meaning in saying that the fact expressed by "Socrates is mortal" is *complex*. The things in the world have various properties, and stand in various relations to each other. That they have these properties and relations are *facts*, and the things and their qualities or relations are quite clearly in some sense or other components of the facts that have those qualities or relations. The analysis of apparently complex *things* such as we started with can be reduced by various means, to the analysis of facts which are apparently about those things. Therefore it is with the analysis of *facts* that one's consideration of the problem of complexity must begin, not by the analysis of apparently complex things.

The complexity of a fact is evidenced, to begin with, by the circumstance

that the proposition which asserts a fact consists of several words, each of which may occur in other contexts. Of course, sometimes you get a proposition expressed by a single word, but if it is expressed fully it is bound to contain several words. The proposition "Socrates is mortal" may be replaced by "Plato is mortal" or by "Socrates is human"; in the first case we alter the subject, in the second the predicate. It is clear that all the propositions in which the word "Socrates" occurs have something in common, and again all the propositions in which the word "mortal" occurs have something in common, something which they do not have in common with all propositions, but only with those which are about Socrates or mortality. It is clear, I think, that the facts corresponding to propositions in which the word "Socrates" occurs have something in common corresponding to the common word "Socrates" which occurs in the propositions, so that you have that sense of complexity to begin with, that in a fact you can get something which it may have in common with other facts, just as you may have "Socrates is human" and "Socrates is mortal," both of them facts, and both having to do with Socrates, although Socrates does not constitute the whole of either of these facts. It is quite clear that in that sense there is a possibility of cutting up a fact into component parts, of which one component may be altered without altering the others, and one component may occur in certain other facts though not in all other facts. I want to make it clear, to begin with, that there is a sense in which facts can be analyzed. I am not concerned with all the difficulties of any analysis, but only with meeting the *prima facie* objections of philosophers who think you really cannot analyze at all.

I am trying as far as possible again this time, as I did last time, to start with perfectly plain truisms. My desire and wish is that the things I start with should be so obvious that you wonder why I spend my time stating them. That is what I aim at, because the point of philosophy is to start with something so simple as not to seem worth stating, and to end with something so paradoxical that no one will believe it.

One *prima facie* mark of complexity in propositions is the fact that they are expressed by several words. I come now to another point, which applies primarily to propositions and thence derivatively to facts. You can understand a proposition when you understand the words of which it is composed even though you never heard the proposition before. That seems a very humble property, but it is a property which marks it as complex and distinguishes it from words whose meaning is simple. When you know the vocabulary, grammar, and syntax of a language, you can understand a proposition in that language even though you never saw it before. In reading a newspaper for example, you become aware of a number of statements which are new to you, and they are intelligible to you immediately, in spite of the fact that they are new, because you understand the words of which

they are composed. This characteristic, that you can understand a proposition through the understanding of its component words, is absent from the component words when those words express something simple. Take the word "red," for example, and suppose—as one always has to do—that "red" stands for a particular shade of color. You will pardon that assumption, but one never can get on otherwise. You cannot understand the meaning of the word "red" except through seeing red things. There is no other way in which it can be done. It is no use to learn languages, or to look up dictionaries. None of these things will help you to understand the meaning of the word "red." In that way it is quite different from the meaning of a proposition. Of course, you can give a definition of the word "red," and here it is very important to distinguish between a definition and an analysis. All analysis is only possible in regard to what is complex, and it always depends, in the last analysis, upon direct acquaintance with the objects which are the meanings of certain simple symbols. It is hardly necessary to observe that one does not define a thing but a symbol. (A "simple" symbol is a symbol whose parts are not symbols.) A simple symbol is quite a different thing from a simple thing. Those objects which it is impossible to symbolize otherwise than by simple symbols may be called "simple," while those which can be symbolized by a combination of symbols may be called "complex." This is, of course, a preliminary definition, and perhaps somewhat circular, but that doesn't much matter at this stage.

I have said that "red" could not be understood except by seeing red things. You might object to that on the ground that you can define red, for example, as "The color with the greatest wave-length." That, you might say, is a definition of "red" and a person could understand that definition even if he had seen nothing red, provided he understood the physical theory of color. But that does not really constitute the meaning of the word "red" in the very slightest. If you take such a proposition as "This is red" and substitute for it "This has the color with the greatest wave-length," you have a different proposition altogether. You can see that at once, because a person who knows nothing of the physical theory of color can understand the proposition "This is red," and can know that it is true, but cannot know that "This has the color which has the greatest wave-length." Conversely, you might have a hypothetical person who could not see red, but who understood the physical theory of color and could apprehend the proposition "This has the color with the greatest wave-length," but who would not be able to understand the proposition "This is red" as understood by the normal uneducated person. Therefore it is clear that if you define "red" as "The color with the greatest wave-length," you are not giving the actual meaning of the word at all; you are simply giving a true description, which is quite a different thing, and the propositions which result are different propositions from those in which the word "red" occurs. In that sense the word "red"

cannot be defined, though in the sense in which a correct description constitutes a definition it can be defined. In the sense of analysis you cannot define "red." That is how it is that dictionaries are able to get on, because a dictionary professes to define all words in the language by means of words in the language, and therefore it is clear that a dictionary must be guilty of a vicious circle somewhere, but it manages it by means of correct descriptions.

I have made it clear, then, in what sense I should say that the word "red" is a simple symbol and the phrase "This is red" a complex symbol. The word "red" can only be understood through acquaintance with the object, whereas the phrase "Roses are red" can be understood if you know what "red" is and what "roses" are, without ever having heard the phrase before. That is a clear mark of what is complex. It is the mark of a complex symbol, and also the mark of the object symbolized by the complex symbol. That is to say, propositions are complex symbols, and the facts they stand for are complex.

The whole question of the meaning of words is very full of complexities and ambiguities in ordinary language. When one person uses a word, he does not mean by it the same thing as another person means by it. I have often heard it said that that is a misfortune. That is a mistake. It would be absolutely fatal if people meant the same things by their words. It would make all intercourse impossible, and language the most hopeless and useless thing imaginable, because the meaning you attach to your words must depend on the nature of the objects you are acquainted with, and since different people are acquainted with different objects, they would not be able to talk to each other unless they attached quite different meanings to their words. We should have to talk only about logic—a not wholly undesirable result. Take, for example, the word "Piccadilly." We, who are acquainted with Piccadilly, attach quite a different meaning to that word from any which could be attached to it by a person who had never been in London: and, supposing that you travel in foreign parts and expatiate on Piccadilly, you will convey to your hearers entirely different propositions from those in your mind. They will know Piccadilly as an important street in London; they may know a lot about it, but they will not know just the things one knows when one is walking along it. If you were to insist on language which was unambiguous, you would be unable to tell people at home what you had seen in foreign parts. It would be altogether incredibly inconvenient to have an unambiguous language, and therefore mercifully we have not got one.

Analysis is not the same thing as definition. You can define a term by means of a correct description, but that does not constitute an analysis. It is analysis, not definition, that we are concerned with at the present moment, so I will come back to the question of analysis.

We may lay down the following provisional definitions:

That the components of a proposition are the symbols we must understand in order to understand the proposition;

That the components of the fact which makes a proposition true or false, as the case may be, are the *meanings* of the symbols which we must understand in order to understand the proposition.

That is not absolutely correct, but it will enable you to understand my meaning. One reason why it fails of correctness is that it does not apply to words which, like "or" and "not," are parts of propositions without corresponding to any part of the corresponding facts. This is a topic for Lecture III.

I call these definitions *preliminary* because they start from the complexity of the proposition, which they define psychologically, and proceed to the complexity of the fact, whereas it is quite clear that in an orderly, proper procedure it is the complexity of the fact that you would start from. It is also clear that the complexity of the fact cannot be something merely psychological. If in astronomical fact the earth moves round the sun, that is genuinely complex. It is not that you think it complex, it is a sort of genuine objective complexity, and therefore one ought in a proper, orderly procedure to start from the complexity of the world and arrive at the complexity of the proposition. The only reason for going the other way round is that in all abstract matters symbols are easier to grasp. I doubt, however, whether complexity, in that fundamental objective sense in which one starts from complexity of a fact, is definable at all. You cannot analyze what you mean by complexity in that sense. You must just apprehend it—at least so I am inclined to think. There is nothing one could say about it, beyond giving criteria such as I have been giving. Therefore, when you cannot get a real proper analysis of a thing, it is generally best to talk round it without professing that you have given an exact definition.

It might be suggested that complexity is essentially to do with symbols, or that it is essentially psychological. I do not think it would be possible seriously to maintain either of these views, but they are the sort of views that will occur to one, the sort of thing that one would try, to see whether it would work. I do not think they will do at all. When we come to the principles of symbolism which I shall deal with in Lecture VII, I shall try to persuade you that in a logically correct symbolism there will always be a certain fundamental identity of structure between a fact and the symbol for it; and that the complexity of the symbol corresponds very closely with the complexity of the facts symbolized by it. Also, as I said before, it is quite directly evident to inspection that the fact, for example, that two things stand in a certain relation to one another—e.g., that this is to the left of that—is itself objectively complex, and not merely that the apprehension of it is complex. The fact that two things stand in a certain relation to each other, or any statement of that sort, has a complexity all of its own. I shall there-

fore in future assume that there is an objective complexity in the world, and that it is mirrored by the complexity of propositions.

A moment ago I was speaking about the great advantages that we derive from the logical imperfections of language, from the fact that our words are all ambiguous. I propose now to consider what sort of language a logically perfect language would be. In a logically perfect language the words in a proposition would correspond one by one with the components of the corresponding fact, with the exception of such words as "or," "not," "if," "then," which have a different function. In a logically perfect language, there will be one word and no more for every simple object, and everything that is not simple will be expressed by a combination of words, by a combination derived, of course, from the words for the simple things that enter in, one word for each simple component. A language of that sort will be completely analytic, and will show at a glance the logical structure of the facts asserted or denied. The language which is set forth in *Principia Mathematica* is intended to be a language of that sort. It is a language which has only syntax and no vocabulary whatsoever. Barring the omission of a vocabulary I maintain that it is quite a nice language. It aims at being that sort of a language that, if you add a vocabulary, would be a logically perfect language. Actual languages are not logically perfect in this sense, and they cannot possibly be, if they are to serve the purposes of daily life. A logically perfect language, if it could be constructed, would not only be intolerably prolix, but, as regards its vocabulary, would be very largely private to one speaker. That is to say, all names that it would use would be private to that speaker and could not enter into the language of another speaker. It could not use proper names for Socrates or Piccadilly or Rumania for the reasons which I went into earlier in the lecture. Altogether you would find that it would be a very inconvenient language indeed. That is one reason why logic is so very backward as a science, because the needs of logic are so extraordinarily different from the needs of daily life. One wants a language in both, and unfortunately it is logic that has to give way, not daily life. I shall, however, assume that we have constructed a logically perfect language, and that we are going on state occasions to use it, and I will now come back to the question which I intended to start with, namely, the analysis of facts.

The simplest imaginable facts are those which consist in the possession of a quality by some particular thing. Such facts, say, as "This is white." They have to be taken in a very sophisticated sense. I do not want you to think about the piece of chalk I am holding, but of what you see when you look at the chalk. If one says, "This is white" it will do for about as simple a fact as you can get hold of. The next simplest would be those in which you have a relation between two facts, such as: "This is to the left of that." Next you come to those where you have a triadic relation between three particulars. (An instance which Royce gives is "A gives B to C.") So you get

relations which require as their minimum three terms, those we call triadic relations; and those which require four terms, which we call tetradic, and so on. There you have a whole infinite hierarchy of facts—facts in which you have a thing and a quality, two things and a relation, three things and a relation, four things and a relation, and so on. That whole hierarchy constitutes what I call *atomic* facts, and they are the simplest sort of fact. You can distinguish among them some simpler than others, because the ones containing a quality are simpler than those in which you have, say, a pentadic relation, and so on. The whole lot of them, taken together, are as facts go very simple, and are what I call atomic facts. The propositions expressing them are what I call atomic propositions.

In every atomic fact there is one component which is naturally expressed by a verb (or, in the case of quality, it may be expressed by a predicate, by an adjective). This one component is a quality of dyadic or triadic or tetradic . . . relation. It would be very convenient, for purposes of talking about these matters, to call a quality a “monadic relation” and I shall do so; it saves a great deal of circumlocution.

In that case you can say that all atomic propositions assert relations of varying orders. Atomic facts contain, besides the relation, the terms of the relation—one term if it is a monadic relation, two if it is dyadic, and so on. These “terms” which come into atomic facts I define as “particulars.”

Particulars = terms of relations in atomic facts. *Definition.*

That is the definition of particulars, and I want to emphasize it because the definition of a particular is something purely logical. The question whether this or that is a particular, is a question to be decided in terms of that logical definition. In order to understand the definition it is not necessary to know beforehand “This is a particular” or “That is a particular.” It remains to be investigated what particulars you can find in the world, if any. The whole question of what particulars you actually find in the real world is a purely empirical one which does not interest the logician as such. The logician as such never gives instances, because it is one of the tests of a logical proposition that you need not know anything whatsoever about the real world in order to understand it.

Passing from atomic facts to atomic propositions, the word expressing a monadic relation or quality is called a “predicate,” and the word expressing a relation of any higher order would generally be a verb, sometimes a single verb, sometimes a whole phrase. At any rate the verb gives the essential nerve, as it were, of the relation. The other words that occur in the atomic propositions, the words that are not the predicate or verb, may be called the subjects of the proposition. There will be one subject in a monadic proposition, two in a dyadic one, and so on. The subjects in a

proposition will be the words expressing the terms of the relation which is expressed by the proposition.

The only kind of word that is theoretically capable of standing for a particular is a *proper name*, and the whole matter of proper names is rather curious.

Proper Name = words for particulars. *Definition.*

I have put that down although, as far as common language goes, it is obviously false. It is true that if you try to think how you are to talk about particulars, you will see that you cannot ever talk about a particular particular except by means of a proper name. You cannot use general words except by way of description. How are we to express in words an atomic proposition? An atomic proposition is one which does mention actual particulars, not merely describe them but actually name them, and you can only name them by means of names. You can see at once for yourself, therefore, that every other part of speech except proper names is obviously quite incapable of standing for a particular. Yet it does seem a little odd if, having made a dot on the blackboard, I call it "John." You would be surprised, and yet how are you to know otherwise what it is that I am speaking of. If I say, "The dot that is on the right-hand side is white" that is a proposition. If I say "This is white" that is quite a different proposition. "This" will do very well while we are all here and can see it, but if I wanted to talk about it to-morrow it would be convenient to have christened it and called it "John." There is no other way in which you can mention it. You cannot really mention *it* itself except by means of a name.

What pass for names in language, like "Socrates," "Plato," and so forth, were originally intended to fulfil this function of standing for particulars, and we do accept, in ordinary daily life, as particulars all sorts of things that really are not so. The names that we commonly use, like "Socrates," are really abbreviations for descriptions; not only that, but what they describe are not particulars but complicated systems of classes or series. A name, in the narrow logical sense of a word whose meaning is a particular, can only be applied to a particular with which the speaker is acquainted, because you cannot name anything you are not acquainted with. You remember, when Adam named the beasts, they came before him one by one, and he became acquainted with them and named them. We are not acquainted with Socrates, and therefore cannot name him. When we use the word "Socrates," we are really using a description. Our thought may be rendered by some such phrase as, "The Master of Plato," or "The philosopher who drank the hemlock," or "The person whom logicians assert to be mortal," but we certainly do not use the name as a name in the proper sense of the word.

That makes it very difficult to get any instance of a name at all in the proper strict logical sense of the word. The only words one does use as names in the logical sense are words like "this" or "that." One can use

"this" as a name to stand for a particular with which one is acquainted at the moment. We say "This is white." If you agree that "This is white," meaning the "this" that you see, you are using "this" as a proper name. But if you try to apprehend the proposition that I am expressing when I say "This is white," you cannot do it. If you mean this piece of chalk as a physical object, then you are not using a proper name. It is only when you use "this" quite strictly, to stand for an actual object of sense, that it is really a proper name. And in that it has a very odd property for a proper name, namely that it seldom means the same thing two moments running and does not mean the same thing to the speaker and to the hearer. It is an *ambiguous* proper name, but it is really a proper name all the same, and it is almost the only thing I can think of that is used properly and logically in the sense that I was talking of for a proper name. The importance of proper names, in the sense of which I am talking, is in the sense of logic, not of daily life. You can see why it is that in the logical language set forth in *Principia Mathematica* there are not any names, because there we are not interested in particular particulars but only in general particulars, if I may be allowed such a phrase.

Particulars have this peculiarity, among the sort of objects that you have to take account of in an inventory of the world, that each of them stands entirely alone and is completely self-subsistent. It has that sort of self-subsistence that used to belong to substance, except that it usually only persists through a very short time, so far as our experience goes. That is to say, each particular that there is in the world does not in any way logically depend upon any other particular. Each one might happen to be the whole universe; it is a merely empirical fact that this is not the case. There is no reason why you should not have a universe consisting of one particular and nothing else. That is a peculiarity of particulars. In the same way, in order to understand a name for a particular, the only thing necessary is to be acquainted with that particular. When you are acquainted with that particular, you have a full, adequate, and complete understanding of the name, and no further information is required. No further information as to the facts that are true of that particular would enable you to have a fuller understanding of the meaning of the name.

¶ Discussion

Mr. Carr: You think there are simple facts that are not complex. Are complexes all composed of simples? Are not the simples that go into complexes themselves complex?

Mr. Russell: No facts are simple. As to your second question, that is, of course, a question that might be argued—whether when a thing is complex it is necessary that it should in analysis have constituents that are simple. I think it is perfectly possible to suppose that complex things are capable of

analysis *ad infinitum*, and that you never reach the simple. I do not think it is true, but it is a thing that one might argue, certainly. I do myself think that complexes—I do not like to talk of complexes—but that facts are composed of simples, but I admit that that is a difficult argument, and it might be that analysis could go on forever.

Mr. Carr: You do not mean that in calling the thing complex, you have asserted that there really are simples?

Mr. Russell: No, I do not think that is *necessarily* implied.

Mr. Neville: I do not feel clear that the proposition "This is white" is in any case a simpler proposition than the proposition "This and that have the same color."

Mr. Russell: That is one of the things I have not had time for. It may be the same as the proposition "This and that have the same color." It may be that white is defined as the color of "this," or rather that the proposition "This is white" means "This is identical in color with that," the color of "that" being, so to speak, the definition of white. That may be, but there is no special reason to think that it is.

Mr. Neville: Are there any monadic relations which would be better examples?

Mr. Russell: I think not. It is perfectly obvious *a priori* that you can get rid of all monadic relations by that trick. One of the things I was going to say if I had had time was that you can get rid of dyadic and reduce to triadic, and so on. But there is no particular reason to suppose that that is the way the world begins, that it begins with relations of order n instead of relations of order 1. You cannot reduce them downward, but you can reduce them upward.

—: If the proper name of a thing, a "this," varies from instant to instant, how is it possible to make any argument?

Mr. Russell: You can keep "this" going for about a minute or two. I made that dot and talked about it for some little time. I mean it varies often. If you argue quickly, you can get some little way before it is finished. I think things last for a finite time, a matter of some seconds or minutes or whatever it may happen to be.

—: You do not think that air is acting on that and changing it?

Mr. Russell: It does not matter about that if it does not alter its appearance enough for you to have a different sense-datum.

III. ATOMIC AND MOLECULAR PROPOSITIONS

I did not quite finish last time the syllabus that I intended for Lecture II, so I must first do that.

I had been speaking at the end of my last lecture on the subject of the

self-subsistence of particulars, how each particular has its being independently of any other and does not depend upon anything else for the logical possibility of its existence. I compared particulars with the old conception of substance, that is to say, they have the quality of self-subsistence that used to belong to substance, but not the quality of persistence through time. A particular, as a rule, is apt to last for a very short time indeed, not an instant but a very short time. In that respect particulars differ from the old substances but in their logical position they do not. There is, as you know, a logical theory which is quite opposed to that view, a logical theory according to which, if you really understood any one thing, you would understand everything. I think that rests upon a certain confusion of ideas. When you have acquaintance with a particular, you understand that particular itself quite fully, independently of the fact that there are a great many propositions about it that you do not know, but propositions concerning the particular are not necessary to be known in order that you may know what the particular itself is. It is rather the other way round. In order to understand a proposition in which the name of a particular occurs, you must already be acquainted with that particular. The acquaintance with the simpler is presupposed in the understanding of the more complex, but the logic that I should wish to combat maintains that in order thoroughly to know any one thing, you must know all its relations and all its qualities, all the propositions in fact in which that thing is mentioned; and you deduce of course from that that the world is an interdependent whole. It is on a basis of that sort that the logic of monism develops. Generally one supports this theory by talking about the "nature" of a thing, assuming that a thing has something which you call its "nature" which is generally elaborately confounded and distinguished from the thing, so that you can get a comfortable see-saw which enables you to deduce whichever results suit the moment. The "nature" of the thing would come to mean all the true propositions in which the thing is mentioned. Of course it is clear that since everything has relations to everything else, you cannot know all the facts of which a thing is a constituent without having some knowledge of everything in the universe. When you realize that what one calls "knowing a particular" merely means acquaintance with that particular and is presupposed in the understanding of any proposition in which that particular is mentioned, I think you also realize that you cannot take the view that the understanding of the name of the particular presupposes knowledge of all the propositions concerning that particular.

I should like to say about understanding, that that phrase is often used mistakenly. People speak of "understanding the universe" and so on. But, of course, the only thing you can really understand (in the strict sense of the word) is a symbol, and to understand a symbol is to know what it stands for.

I pass on from particulars to predicates and relations and what we mean by understanding the words that we use for predicates and relations. A very

great deal of what I am saying in this course of lectures consists of ideas which I derived from my friend Wittgenstein. But I have had no opportunity of knowing how far his ideas have changed since August 1914, nor whether he is alive or dead, so I cannot make any one but myself responsible for them.

Understanding a predicate is quite a different thing from understanding a name. By a predicate, as you know, I mean the word that is used to designate a quality such as red, white, square, round, and the understanding of a word like that involves a different kind of act of mind from that which is involved in understanding a name. To understand a name you must be acquainted with the particular of which it is a name, and you must know that it is the name of that particular. You do not, that it is to say, have any suggestion of the form of a proposition, whereas in understanding a predicate you do. To understand "red," for instance, is to understand what is meant by saying that a thing is red. You have to bring in the form of a proposition. You do not have to know, concerning any particular "this," that "This is red" but you have to know what is the meaning of saying that anything is red. You have to understand what one would call "being red." The importance of that is in connection with the theory of types, which I shall come to later on. It is in the fact that a predicate can never occur except as a predicate. When it seems to occur as a subject, the phrase wants amplifying and explaining, unless, of course, you are talking about the word itself. You may say "'Red' is a predicate," but then you must have "red." When you understand "red" it means that you understand propositions of the form that " x is red." So that the understanding of a predicate is something a little more complicated than the understanding of a name, just because of that. Exactly the same applies to relations, and in fact all those things that are not particulars. Take, e.g., "before" in " x is before y ": you understand "before" when you understand what that would mean if x and y were given. I do not mean you know whether it is true, but you understand the proposition. Here again the same thing applies. A relation can never occur except as a relation, never as a subject. You will always have to put in hypothetical terms, if not real ones, such as "If I say that x is before y , I assert a relation between x and y ." It is in this way that you will have to expand such a statement as "'Before' is a relation" in order to get its meaning.

The different sorts of words, in fact, have different sorts of uses and must be kept always to the right use and not to the wrong use, and it is fallacies arising from putting symbols to wrong uses that lead to the contradictions concerned with types.

There is just one more point before I leave the subjects I meant to have dealt with last time, and that is a point which came up in discussion at the conclusion of the last lecture, namely, that if you like you can get a formal reduction of (say) monadic relations to dyadic to triadic, or of all the relations below a certain order to all above that order, but the converse reduction

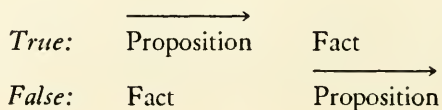
is not possible. Suppose one takes, for example, "red." One says, "This is red," "That is red," and so forth. Now, if anyone is of opinion that there is reason to try to get on without subject-predicate propositions, all that is necessary is to take some standard red thing and have a relation which one might call "color-likeness," sameness of color, which would be a direct relation, not consisting in having a certain color. You can then define the things which are red, as all the things that have color-likeness to this standard thing. That is practically the treatment that Berkeley and Hume recommended, except that they did not recognize that they were reducing qualities to relations, but thought they were getting rid of "abstract ideas" altogether. You can perfectly well do in that way a formal reduction of predicates to relations. There is no objection to that either empirically or logically. If you think it is worth while you can proceed in exactly the same way with dyadic relations, which you can reduce to triadic. Royce used to have a great affection for that process. For some reason he always liked triadic relations better than dyadic ones; he illustrated his preference in his contributions to mathematical logic and the principles of geometry.

All that is possible. I do not myself see any particular point in doing it as soon as you have realized that it is possible. I see no particular reason to suppose that the simplest relations that occur in the world are (say) of order n , but there is no *a priori* reason against it. The converse reduction, on the other hand, is quite impossible except in certain special cases where the relation has some special properties. For example, dyadic relations can be reduced to sameness of predicate when they are symmetrical and transitive. Thus, e.g., the relation of color-likeness will have the property that if A has exact color-likeness with B and B with C , then A has exact color-likeness with C ; and if A has it with B , B has it with A . But the case is otherwise with asymmetrical relations.

Take for example " A is greater than B ." It is obvious that " A is greater than B " does not consist in A and B having a common predicate, for if it did it would require that B should also be greater than A . It is also obvious that it does not consist merely in their having different predicates, because if A has a different predicate from B , B has a different predicate from A , so that in either case, whether of sameness or difference of predicate, you get a symmetrical relation. For instance, if A is of a different color from B , B is of a different color from A . Therefore when you get symmetrical relations, you have relations which it is formally possible to reduce to either sameness of predicate or difference of predicate, but when you come to asymmetrical relations there is no such possibility. This impossibility of reducing dyadic relations to sameness or difference of predicate is a matter of a good deal of importance in connection with traditional philosophy, because a great deal of traditional philosophy depends upon the assumption that every proposition really is of the subject-predicate form, and that is certainly not the case. That theory dominates a great part of traditional metaphysics and the old idea of

substance and a good deal of the theory of the Absolute, so that that sort of logical outlook which had its imagination dominated by the theory that you could always express a proposition in a subject-predicate form has had a very great deal of influence upon traditional metaphysics.

That is the end of what I ought to have said last time, and I come on now to the proper topic of to-day's lecture, that is *molecular* propositions. I call them molecular propositions because they contain other propositions which you may call their atoms, and by molecular propositions I mean propositions having such words as "or," "if," "and," and so forth. If I say, "Either to-day is Tuesday, or we have all made a mistake in being here," that is the sort of proposition that I mean that is molecular. Or if I say, "If it rains, I shall bring my umbrella," that again is a molecular proposition because it contains the two parts "It rains" and "I shall bring my umbrella." If I say, "It did rain and I did bring my umbrella," that again is a molecular proposition. Or if I say, "The supposition of its raining is incompatible with the supposition of my not bringing my umbrella," that again is a molecular proposition. There are various propositions of that sort, which you can complicate *ad infinitum*. They are built up out of propositions related by such words as "or," "if," "and," and so on. You remember that I defined an atomic proposition as one which contains a single verb. Now there are two different lines of complication in proceeding from these to more complex propositions. There is the line that I have just been talking about, where you proceed to molecular propositions, and there is another line which I shall come to in a later lecture, where you have not two related propositions, but one proposition containing two or more verbs. Examples are got from believing, wishing, and so forth. "I believe Socrates is mortal." You have there two verbs, "believe" and "is." Or "I wish I were immortal." Anything like that where you have a wish or a belief or a doubt involves two verbs. A lot of psychological attitudes involve two verbs, not, as it were, crystallized out, but two verbs within one unitary proposition. But I am talking to-day about molecular propositions, and you will understand that you can make propositions, with "or" and "and" and so forth, where the constituent propositions are not atomic, but for the moment we can confine ourselves to the case where the constituent propositions are atomic. When you take an atomic proposition, or one of these propositions like "believing," when you take any proposition of that sort, there is just one fact which is pointed to by the proposition, pointed to either truly or falsely. The essence of a proposition is that it can correspond in two ways with a fact, in what one may call the true way or the false way. You might illustrate it in a picture like this:



Supposing you have the proposition "Socrates is mortal," either there would be the fact that Socrates is mortal or there would be the fact that Socrates is not mortal. In the one case it corresponds in a way that makes the proposition true, in the other case in a way that makes the proposition false. That is one way in which a proposition differs from a name.

There are, of course, two propositions corresponding to every fact, one true and one false. There are no false facts, so you cannot get one fact for every proposition but only for every pair of propositions. All that applies to atomic propositions. But when you take such a proposition as " p or q ," "Socrates is mortal or Socrates is living still," there you will have two different facts involved in the truth or the falsehood of your proposition " p or q ." There will be the fact that corresponds to p , and there will be the fact that corresponds to q , and both of those facts are relevant in discovering the truth or falsehood of " p or q ." I do not suppose there is in the world a single disjunctive fact corresponding to " p or q ." It does not look plausible that in the actual objective world there are facts going about which you could describe as " p or q ." But I would not lay too much stress on what strikes one as plausible: it is not a thing you can rely on altogether. For the present I do not think any difficulties will arise from the supposition that the truth or falsehood of this proposition " p or q " does not depend upon a single objective fact which is disjunctive but depends on the two facts one of which corresponds to p and the other to q : p will have a fact corresponding to it and q will have a fact corresponding to it. That is to say, the truth or falsehood of this proposition " p or q " depends upon two facts and not upon one, as p does and as q does. Generally speaking, as regards these things that you make up out of two propositions, the whole of what is necessary in order to know their meaning is to know under what circumstances they are true, given the truth or falsehood of p and the truth or falsehood of q . That is perfectly obvious. You have as a schema,

for " p or q ," using "TT" for " p and q both true"
 "TF" for " p true and q false," etc.

TT	TF	FT	FF
T	T	T	F

where the bottom line states the truth or the falsehood of " p or q ." You must not look about the real world for an object which you can call "or," and say, "Now, look at this. This is 'or.'" There is no such thing, and if you try to analyze " p or q " in that way you will get into trouble. But the meaning of disjunction will be entirely explained by the above schema.

I call these things truth-functions of propositions, when the truth or falsehood of the molecular proposition depends only on the truth or falsehood of the propositions that enter into it. The same applies to " p and q " and "if p then q " and " p is incompatible with q ." When I say " p is incom-

patible with q " I simply mean to say that they are not both true. I do not mean any more. Those sort of things are called truth-functions, and these molecular propositions that we are dealing with to-day are instances of truth-functions. If p is a proposition, the statement that "I believe p " does not depend for its truth or falsehood, simply upon the truth or falsehood of p , since I believe some but not all true propositions and some but not all false propositions.

I just want to give you a little talk about the way these truth-functions are built up. You can build up all these different sorts of truth-functions out of one source, namely " p is incompatible with q ," meaning by that that they are not both true, that one at least of them is false.

We will denote " p is incompatible with q " by p/q .

Take for instance p/p , i.e., " p is incompatible with itself." In that case clearly p will be false, so that you can take " p/p " as meaning " p is false," i.e., $p/p = \text{not } p$. The meaning of molecular propositions is entirely determined by their truth-schema and there is nothing more in it than that, so that when you have got two things of the same truth-schema you can identify them.

Suppose you want "if p then q ," that simply means that you cannot have p without having q , so that p is incompatible with the falsehood of q . Thus,

$$\text{"If } p \text{ then } q\text{"} = p/(q/q)$$

When you have that, it follows of course at once that if p is true, q is true, because you cannot have p true and q false.

Suppose you want " p or q ," that means that the falsehood of p is incompatible with the falsehood of q . If p is false, q is not false, and *vice versa*. That will be

$$(p/p) / (q/q)$$

Suppose you want " p and q are both true." That will mean that p is not incompatible with q . When p and q are both true, it is not the case that at least one of them is false. Thus,

$$\text{"}p \text{ and } q \text{ are both true"} = (p/q) / (p/q)$$

The whole of the logic of deduction is concerned simply with complications and developments of this idea. This idea of incompatibility was first shown to be sufficient for the purpose by Mr. Sheffer, and there was a good deal of work done subsequently by M. Nicod. It is a good deal simpler when it is done this way than when it is done in the way of *Principia Mathematica*, where there are two primitive ideas to start with, namely "or" and "not." Here you can get on with only a single premise for deduction. I will not develop this subject further because it takes you right into mathematical logic.

I do not see any reason to suppose that there is a complexity in the facts corresponding to these molecular propositions, because, as I was saying, the correspondence of a molecular proposition with facts is of a different sort from the correspondence of an atomic proposition with a fact. There is one special point that has to be gone into in connection with this, that is the question: Are there negative facts? Are there such facts as you might call the fact that "Socrates is not alive"? I have assumed in all that I have said hitherto that there are negative facts, that for example if you say "Socrates is alive," there is corresponding to that proposition in the real world the fact that Socrates is not alive. One has a certain repugnance to negative facts, the same sort of feeling that makes you wish not to have a fact " p or q " going about the world. You have a feeling that there are only positive facts, and that negative propositions have somehow or other got to be expressions of positive facts. When I was lecturing on this subject at Harvard I argued that there were negative facts, and it nearly produced a riot: the class would not hear of there being negative facts at all. I am still inclined to think that there are. However, one of the men to whom I was lecturing at Harvard, Mr. Demos, subsequently wrote an article in *Mind* to explain why there are no negative facts. It is in *Mind* for April, 1917. I think he makes as good a case as can be made for the view that there are no negative facts. It is a difficult question. I really only ask that you should not dogmatize. I do not say positively that there are, but there may be.

There are certain things you can notice about negative propositions. Mr. Demos points out, first of all, that a negative proposition is not in any way dependent on a cognitive subject for its definition. To this I agree. Suppose you say, when I say "Socrates is not alive," I am merely expressing disbelief in the proposition that Socrates is alive. You have got to find something or other in the real world to make this disbelief true, and the only question is what. That is his first point.

His second is that a negative proposition must not be taken at its face value. You cannot, he says, regard the statement "Socrates is not alive" as being an expression of a fact in the same sort of direct way in which "Socrates is human" would be an expression of a fact. His argument for that is solely that he cannot believe that there are negative facts in the world. He maintains that there cannot be in the real world such facts as "Socrates is not alive," taken, i.e., as simple facts, and that therefore you have got to find some explanation of negative propositions, some interpretation, and that they cannot be just as simple as positive propositions. I shall come back to that point, but on this I do not feel inclined to agree.

His third point I do not entirely agree with: that when the word "not" occurs, it cannot be taken as a qualification of the predicate. For instance, if you say that "This is not red," you might attempt to say that "not-red" is a predicate, but that of course won't do; in the first place because a great many propositions are not expressions of predicates; in the second place because the word "not" applies to the whole proposition. The proper expression

would be "not; this is red"; the "not" applies to the whole proposition "this is red," and of course in many cases you can see that quite clearly. If you take a case I took in discussing descriptions: "The present king of France is not bald." If you take "not-bald" as a predicate, that would have to be judged false on the ground that there is not a present king of France. But it is clear that the proposition "The present king of France is bald" is a false proposition, and therefore the negative of that will have to be a true proposition, and that could not be the case if you take "not-bald" as a predicate, so that in all cases where a "not" comes in, the "not" has to be taken to apply to the whole proposition. "Not- p " is the proper formula.

We have come now to the question, how are we really to interpret "not- p " and the suggestion offered by Mr. Demos is that when we assert "not- p " we are really asserting that there is some proposition q which is true and is incompatible with p ("an opposite of p " is his phrase, but I think the meaning is the same). That is his suggested definition.

"not- p " means "There is a proposition q which is true and is incompatible with p ."

As, e.g., if I say "This chalk is not red," I shall be meaning to assert that there is some proposition, which in this case would be the proposition "This chalk is white," which is inconsistent with the proposition "It is red," and that you use these general negative forms because you do not happen to know what the actual proposition is that is true and is incompatible with p . Or, of course, you may possibly know what the actual proposition is, but you may be more interested in the fact that p is false than you are in the particular example which makes it false. As, for instance, you might be anxious to prove that someone is a liar, and you might be very much interested in the falsehood of some proposition which he had asserted. You might also be more interested in the general proposition than in the particular case, so that if some one had asserted that that chalk was red, you might be more interested in the fact that it was not red than in the fact that it was white.

I find it very difficult to believe that theory of falsehood. You will observe that in the first place there is this objection, that it makes incompatibility fundamental and an objective fact, which is not so very much simpler than allowing negative facts. You have got to have here "That p is incompatible with q " in order to reduce "not" to incompatibility, because this has got to be the corresponding fact. It is perfectly clear, whatever may be the interpretation of "not," that there is *some* interpretation which will give you a fact. If I say "There is not a hippopotamus in this room," it is quite clear there is some way of interpreting that statement according to which there is a corresponding fact, and the fact cannot be merely that every part of this room is filled up with something that is not a hippopotamus. You would come back to the necessity for some kind or other of fact of the sort that we

have been trying to avoid. We have been trying to avoid both negative facts and molecular facts, and all that this succeeds in doing is to substitute molecular facts for negative facts, and I do not consider that that is very successful as a means of avoiding paradox, especially when you consider this, that even if incompatibility is to be taken as a sort of fundamental expression of fact, incompatibility is not between facts but between propositions. If I say " p is incompatible with q ," one at least of p and q has got to be false. It is clear that no two *facts* are incompatible. The incompatibility holds between the propositions, between the p and the q , and therefore if you are going to take incompatibility as a fundamental fact, you have got, in explaining negatives, to take as your fundamental fact something involving propositions as opposed to facts. It is quite clear that propositions are not what you might call "real." If you were making an inventory of the world, propositions would not come in. Facts would, beliefs, wishes, wills would, but propositions would not. They do not have being independently, so that this incompatibility of propositions taken as an ultimate fact of the real world will want a great deal of treatment, a lot of dressing up before it will do. Therefore as a simplification to avoid negative facts, I do not think it really is very successful. I think you will find that it is simpler to take negative facts as facts, to assume that "Socrates is not alive" is really an objective fact in the same sense in which "Socrates is human" is a fact. This theory of Mr. Demos's that I have been setting forth here is a development of the one one hits upon at once when one tries to get around negative facts, but for the reasons that I have given, I do not think it really answers to take things that way, and I think you will find that it is better to take negative facts as ultimate. Otherwise you will find it so difficult to say what it is that corresponds to a proposition. When, e.g., you have a false positive proposition, say "Socrates is alive," it is false because of a fact in the real world. A thing cannot be false except because of a fact, so that you find it extremely difficult to say what exactly happens when you make a positive assertion that is false, unless you are going to admit negative facts. I think all those questions are difficult and there are arguments always to be adduced both ways, but on the whole I do incline to believe that there are negative facts and that there are not disjunctive facts. But the denial of disjunctive facts leads to certain difficulties which we shall have to consider in connection with general propositions in a later lecture.

II Discussion

—: Do you consider that the proposition "Socrates is dead" is a positive or a negative fact?

Mr. Russell: It is partly a negative fact. To say that a person is dead is

complicated. It is two statements rolled into one: "Socrates was alive" and "Socrates is not alive."

—: Does putting the "not" into it give it a formal character of negative and vice versa?

Mr. Russell: No, I think you must go into the meaning of words.

—: I should have thought there was a great difference between saying that "Socrates is alive" and saying that "Socrates is not a living man." I think it is possible to have what one might call a negative existence and that things exist of which we cannot take cognizance. Socrates undoubtedly did live but he is no longer in the condition of living as a man.

Mr. Russell: I was not going into the question of existence after death but simply taking words in their every-day signification.

—: What is precisely your test as to whether you have got a positive or negative proposition before you?

Mr. Russell: There is no formal test.

—: If you had a formal test, would it not follow that you would know whether there were negative facts or not?

Mr. Russell: No, I think not. In the perfect logical language that I sketched in theory, it would always be obvious at once whether a proposition was positive or negative. But it would not bear upon how you are going to interpret negative propositions.

—: Would the existence of negative facts ever be anything more than a mere definition?

Mr. Russell: Yes, I think it would. It seems to me that the business of metaphysics is to describe the world, and it is in my opinion a real definite question whether in a complete description of the world you would have to mention negative facts or not.

—: How do you define a negative fact?

Mr. Russell: You could not give a general definition if it is right that negativeness is an ultimate.

IV. PROPOSITIONS AND FACTS WITH MORE THAN ONE VERB; BELIEFS, ETC.

You will remember that after speaking about atomic propositions I pointed out two more complicated forms of propositions which arise immediately on proceeding further than that: the first, which I call molecular propositions, which I dealt with last time, involving such words as "or," "and," "if," and the second involving two or more verbs such as believing, wishing, willing, and so forth. In the case of molecular propositions it was not clear that we had to deal with any new form of fact, but only with a new form of proposition, i.e., if you have a disjunctive proposition such as " p or q " it does not seem very plausible to say that there is in the world a disjunc-

tive fact corresponding to " p or q " but merely that there is a fact corresponding to p and a fact corresponding to q , and the disjunctive proposition derives its truth or falsehood from those two separate facts. Therefore in that case one was dealing only with a new form of proposition and not with a new form of fact. To-day we have to deal with a new form of fact.

I think one might describe philosophical logic, the philosophical portion of logic which is the portion that I am concerned with in these lectures since Christmas (1917), as an inventory, or if you like a more humble word, a "Zoo" containing all the different forms that facts may have. I should prefer to say "forms of facts" rather than "forms of propositions." To apply that to the case of molecular propositions which I dealt with last time, if one were pursuing this analysis of the forms of facts, it would be *belief in* a molecular proposition that one would deal with rather than the molecular proposition itself. In accordance with the sort of realistic bias that I should put into all study of metaphysics, I should always wish to be engaged in the investigation of some actual fact or set of facts, and it seems to me that that is so in logic just as much as it is in zoology. In logic you are concerned with the forms of facts, with getting hold of the different sorts of facts, different *logical* sorts of facts, that there are in the world. Now I want to point out to-day that the facts that occur when one believes or wishes or wills have a different logical form from the atomic facts containing a single verb which I dealt with in my second lecture. (There are, of course, a good many forms that facts may have, a strictly infinite number, and I do not wish you to suppose that I pretend to deal with all of them.) Suppose you take any actual occurrence of a belief. I want you to understand that I am not talking about beliefs in the sort of way in which judgment is spoken of in theory of knowledge, in which you would say there is *the* judgment that two and two are four. I am talking of the actual occurrence of a belief in a particular person's mind at a particular moment, and discussing what sort of a fact that is. If I say "What day of the week is this?" and you say "Tuesday," there occurs in your mind at that moment the belief that this is Tuesday. The thing I want to deal with to-day is the question, what is the form of the fact which occurs when a person has a belief. Of course you see that the sort of obvious first notion that one would naturally arrive at would be that a belief is a relation to the proposition. "I believe the proposition p ." "I believe that to-day is Tuesday." "I believe that two and two are four." Something like that. It seems on the face of it as if you had there a relation of the believing subject to a proposition. That view won't do for various reasons which I shall go into. But you have therefore got to have a theory of belief which is not exactly that. Take any sort of proposition, say "I believe Socrates is mortal." Suppose that that belief does actually occur. The statement that it occurs is a statement of fact. You have there two verbs. You may have more than two verbs, you may have any number greater than one. I may believe that Jones is of the opinion that Socrates is mortal. There

you have more than two verbs. You may have any number, but you cannot have less than two. You will perceive that it is not only the proposition that has the two verbs, but also the fact, which is expressed by the proposition, has two constituents corresponding to verbs. I shall call those constituents verbs for the sake of shortness, as it is very difficult to find any word to describe all those objects which one denotes by verbs. Of course, that is strictly using the word "verb" in two different senses, but I do not think it can lead to any confusion if you understand that it is being so used. This fact (the belief) is one fact. It is not like what you had in molecular propositions where you had (say) "*p* or *q*." It is just one single fact that you have a belief. That is obvious from the fact that you can believe a falsehood. It is obvious from the fact of false belief that you cannot cut off one part: you cannot have

I believe / Socrates is mortal.

There are certain questions that arise about such facts, and the first that arises is, Are they undeniable facts or can you reduce them in some way to relations of other facts? Is it really necessary to suppose that there are irreducible facts, of which that sort of thing is a verbal expression? On that question until fairly lately I should certainly not have supposed that any doubt could arise. It had not really seemed to me until fairly lately that that was a debatable point. I still believe that there are facts of that form, but I see that it is a substantial question that needs to be discussed.

1. *Are beliefs, etc., irreducible facts?*

"Etc." covers understanding a proposition; it covers desiring, willing, any other attitude of that sort that you may think of that involves a proposition. It seems natural to say one believes a proposition and unnatural to say one desires a proposition, but as a matter of fact that is only a prejudice. What you believe and what you desire are of exactly the same nature. You may desire to get some sugar to-morrow and of course you may possibly believe that you will. I am not sure that the logical form is the same in the case of will. I am inclined to think that the case of will is more analogous to that of perception, in going direct to facts, and excluding the possibility of falsehood. In any case desire and belief are of exactly the same form logically.

Pragmatists and some of the American realists, the school whom one calls neutral monists, deny altogether that there is such a phenomenon as belief in the sense I am dealing with. They do not deny it in words, they do not use the same sort of language that I am using, and that makes it difficult to compare their views with the views I am speaking about. One has really to translate what they say into language more or less analogous to ours before one can make out where the points of contact or difference are. If you take the works of James in his *Essays in Radical Empiricism* or Dewey in his *Essays in Experimental Logic* you will find that they are denying altogether

that there is such a phenomenon as belief in the sense I am talking of. They use the word "believe" but they mean something different. You come to the view called "behaviorism," according to which you mean, if you say a person believes a thing, that he behaves in a certain fashion; and that hangs together with James's pragmatism. James and Dewey would say: when I believe a proposition, that *means* that I act in a certain fashion, that my behavior has certain characteristics, and my belief is a true one if the behavior leads to the desired result and is a false one if it does not. That, if it is true, makes their pragmatism a perfectly rational account of truth and falsehood, if you do accept their view that belief as an isolated phenomenon does not occur. That is therefore the first thing one has to consider. It would take me too far from logic to consider that subject as it deserves to be considered, because it is a subject belonging to psychology, and it is only relevant to logic in this one way that it raises a doubt whether there are any facts having the logical form that I am speaking of. In the question of this logical form that involves two or more verbs you have a curious interlacing of logic with empirical studies, and of course that may occur elsewhere, in this way, that an empirical study gives you an example of a thing having a certain logical form, and you cannot really be sure that there are things having a given logical form except by finding an example, and the finding of an example is itself empirical. Therefore in that way empirical facts are relevant to logic at certain points. I think theoretically one might know that there were those forms without knowing any instance of them, but practically, situated as we are, that does not seem to occur. Practically, unless you can find an example of the form you won't know that there is that form. If I cannot find an example containing two or more verbs, you will not have reason to believe in the theory that such a form occurs.

When you read the works of people like James and Dewey on the subject of belief, one thing that strikes you at once is that the sort of thing they are thinking of as the object of belief is quite different from the sort of thing I am thinking of. They think of it always as a thing. They think you believe in God or Homer: you believe in an object. That is the picture they have in their minds. It is common enough, in common parlance, to talk that way, and they would say, the first crude approximation that they would suggest would be that you believe truly when there is such an object and that you believe falsely when there is not. I do not mean they would say that exactly, but that would be the crude view from which they would start. They do not seem to have grasped the fact that the objective side in belief is better expressed by a proposition than by a single word, and that, I think, has a great deal to do with their whole outlook on the matter of what belief consists of. The object of belief in their view is generally, not relations between things, or things having qualities, or what not, but just single things which may or may not exist. That view seems to me radically and absolutely mistaken. In the first place there are a great many judgements you cannot possibly fit

into that scheme, and in the second place it cannot possibly give any explanation to false beliefs, because when you believe that a thing exists and it does not exist, the thing is not there, it is nothing, and it cannot be the right analysis of a false belief to regard it as a relation to what is really nothing. This is an objection to supposing that belief consists simply in relation to the object. It is obvious that if you say "I believe in Homer" and there was no such person as Homer, your belief cannot be a relation to Homer, since there is no "Homer." Every fact that occurs in the world must be composed entirely of constituents that there are, and not of constituents that there are not. Therefore when you say "I believe in Homer" it cannot be the right analysis of the thing to put it like that. What the right analysis is I shall come on to in the theory of descriptions. I come back now to the theory of behaviorism which I spoke of a moment ago. Suppose, e.g., that you are said to believe that there is a train at 10:25. This means, we are told, that you start for the station at a certain time. When you reach the station you see it is 10:24 and you run. That behavior constitutes your belief that there is a train at that time. If you catch your train by running, your belief was true. If the train went at 10:23, you miss it, and your belief was false. That is the sort of thing that they would say constitutes belief. There is not a single state of mind which consists in contemplating this eternal verity, that the train starts at 10:25. They would apply that even to the most abstract things. I do not myself feel that that view of things is tenable. It is a difficult one to refute because it goes very deep and one has the feeling that perhaps, if one thought it out long enough and became sufficiently aware of all its implications, one might find after all that it was a feasible view; but yet I do not *feel* it feasible. It hangs together, of course, with the theory of neutral monism, with the theory that the material constituting the mental is the same as the material constituting the physical, just like the Post Office directory which gives you people arranged geographically and alphabetically. This whole theory hangs together with that. I do not mean necessarily that all the people that profess the one profess the other, but that the two do essentially belong together. If you are going to take that view, you have to explain away belief and desire, because things of that sort do seem to be mental phenomena. They do seem rather far removed from the sort of thing that happens in the physical world. Therefore people will set to work to explain away such things as belief, and reduce them to bodily behavior; and your belief in a certain proposition will consist in the behavior of your body. In the crudest terms that is what that view amounts to. It does enable you to get on very well without mind. Truth and falsehood in that case consist in the relation of your bodily behavior to a certain fact, the sort of distant fact which is the purpose of your behavior, as it were, and when your behavior is satisfactory in regard to that fact your belief is true, and when your behavior is unsatisfactory in regard to that fact your belief is false. The logical essence, in that view, will be a relation be-

tween two facts having the same sort of form as a causal relation, i.e., on the one hand there will be your bodily behavior which is one fact, and on the other hand the fact that the train starts at such and such a time, which is another fact, and out of a relation of those two the whole phenomenon is constituted. The thing you will get will be logically of the same form as you have in cause, where you have "This fact causes that fact." It is quite a different logical form from the facts containing two verbs that I am talking of to-day.

I have naturally a bias in favor of the theory of neutral monism because it exemplifies Occam's razor. I always wish to get on in philosophy with the smallest possible apparatus, partly because it diminishes the risk of error, because it is not necessary to deny the entities you do not assert, and therefore, you run less risk of error the fewer entities you assume. The other reason—perhaps a somewhat frivolous one—is that every diminution in the number of entities increases the amount of work for mathematical logic to do in building up things that look like the entities you used to assume. Therefore the whole theory of neutral monism is pleasing to me, but I do find so far very great difficulty in believing it. You will find a discussion of the whole question in some articles I wrote in *The Monist*, especially in July 1914, and in the two previous numbers also. I should really want to rewrite them rather because I think some of the arguments I used against neutral monism are not valid. I place most reliance on the argument about "emphatic particulars," "this," "I," all that class of words, that pick out certain particulars from the universe by their relation to oneself, and I think by the fact that they, or particulars related to them, are present to you at the moment of speaking. "This," of course, is what I call an "emphatic particular." It is simply a proper name for the present object of attention, a proper name, meaning nothing. It is ambiguous, because, of course, the object of attention is always changing from moment to moment and from person to person. I think it is extremely difficult, if you get rid of consciousness altogether, to explain what you mean by such a word as "this," what it is that makes the absence of impartiality. You would say that in a purely physical world there would be a complete impartiality. All parts of time and all regions of space would seem equally emphatic. But what really happens is that we pick out certain facts, past and future and all that sort of thing; they all radiate out from "this," and I have not myself seen how one can deal with the notion of "this" on the basis of neutral monism. I do not lay that down dogmatically, only I do not see how it can be done. I shall assume for the rest of this lecture that there are such facts as beliefs and wishes and so forth. It would take me really the whole of my course to go into the question fully. Thus we come back to more purely logical questions from this excursion into psychology, for which I apologize.

2. *What is the status of p in "I believe p"?*

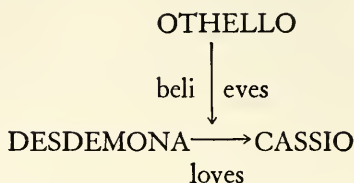
You cannot say that you believe *facts*, because your beliefs are sometimes wrong. You can say that you *perceive* facts, because perceiving is not liable to error. Wherever it is facts alone that are involved, error is impossible. Therefore you cannot say you believe facts. You have to say that you believe propositions. The awkwardness of that is that obviously propositions are nothing. Therefore that cannot be the true account of the matter. When I say "Obviously propositions are nothing" it is not perhaps quite obvious. Time was when I thought there were propositions, but it does not seem to me very plausible to say that in addition to facts there are also these curious shadowy things going about such as "That to-day is Wednesday" when in fact it is Tuesday. I cannot believe they go about the real world. It is more than one can manage to believe, and I do think no person with a vivid sense of reality can imagine it. One of the difficulties of the study of logic is that it is an exceedingly abstract study dealing with the most abstract things imaginable, and yet you cannot pursue it properly unless you have a vivid instinct as to what is real. You must have that instinct rather well developed in logic. I think otherwise you will get into fantastic things. I think Meinong is rather deficient in just that instinct for reality. Meinong maintains that there is such an object as the round square only it does not exist, and it does not even subsist, but nevertheless there is such an object, and when you say "The round square is a fiction," he takes it that there is an object "the round square" and there is a predicate "fiction." No one with a sense of reality would so analyze that proposition. He would see that the proposition wants analyzing in such a way that you won't have to regard the round square as a constituent of that proposition. To suppose that in the actual world of nature there is a whole set of false propositions going about is to my mind monstrous. I cannot bring myself to suppose it. I cannot believe that they are there in the sense in which facts are there. There seems to me something about the fact that "To-day is Tuesday" on a different level of reality from the supposition "That to-day is Wednesday." When I speak of the proposition "That to-day is Wednesday" I do not mean the occurrence in future of a state of mind in which you think it is Wednesday, but I am talking about the theory that there is something quite logical, something not involving mind in any way; and such a thing as that I do not think you can take a false proposition to be. I think a false proposition must, wherever it occurs, be subject to analysis, be taken to pieces, pulled to bits, and shown to be simply separate pieces of one fact in which the false proposition has been analyzed away. I say that simply on the ground of what I should call an instinct of reality. I ought to say a word or two about "reality." It is a vague word, and most of its uses are improper. When I talk about reality as I am now doing, I can explain best what I mean by saying that I mean everything you would have to mention in a complete description of the world; that will convey to you what I mean. Now I do not think that false propositions would

have to be mentioned in a complete description of the world. False beliefs would, of course, false suppositions would, and desires for what does not come to pass, but not false propositions all alone, and therefore when you, as one says, believe a false proposition, that cannot be an accurate account of what occurs. It is not accurate to say "I believe the proposition p " and regard the occurrence as a twofold relation between me and p . The logical form is just the same whether you believe a false or a true proposition. Therefore in all cases you are not to regard belief as a two-term relation between yourself and a proposition, and you have to analyze up the proposition and treat your belief differently. Therefore the belief does not really contain a proposition as a constituent but only contains the constituents of the proposition as constituents. You cannot say when you believe, "What is it that you believe?" There is no answer to that question, i.e., there is not a single thing that you are believing. "I believe that to-day is Tuesday." You must not suppose that "That to-day is Tuesday" is a single object which I am believing. That would be an error. That is not the right way to analyze the occurrence, although that analysis is linguistically convenient, and one may keep it provided one knows that it is not the truth.

3. How shall we describe the logical form of a belief?

I want to try to get an account of the way that a belief is made up. That is not an easy question at all. You cannot make what I should call a map-in-space of a belief. You can make a map of an atomic fact but not of a belief, for the simple reason that space-relations always are of the atomic sort or complications of the atomic sort. I will try to illustrate what I mean. The point is in connection with there being two verbs in the judgment and with the fact that both verbs have got to occur as verbs, because if a thing is a verb it cannot occur otherwise than as a verb. Suppose I take "A believes that B loves C." "Othello believes that Desdemona loves Cassio." There you have a false belief. You have this odd state of affairs that the verb "loves" occurs in that proposition and seems to occur as relating Desdemona to Cassio whereas in fact it does not do so, but yet it does occur as a verb, it does occur in the sort of way that a verb should do. I mean that when A believes that B loves C, you have to have a verb in the place where "love" occurs. You cannot put a substantive in its place. Therefore it is clear that the subordinate verb (i.e., the verb other than believing) is functioning as a verb, and seems to be relating two terms, but as a matter of fact does not when a judgment happens to be false. That is what constitutes the puzzle about the nature of belief. You will notice that wherever one gets to really close quarters with the theory of error one has the puzzle of how to deal with error without assuming the existence of the non-existent. I mean that every theory of error sooner or later wrecks itself by assuming the existence of the non-existent. As when I say "Desdemona loves Cassio," it seems as if you have a non-existent love between Desdemona and Cassio, but that is just as wrong as a non-existent unicorn. So you have to explain the whole theory of judg-

ment in some other way. I come now to this question of a map. Suppose you try such a map as this:



This question of making a map is not so strange as you might suppose because it is part of the whole theory of symbolism. It is important to realize where and how a symbolism of that sort would be wrong: where and how it is wrong is that in the symbol you have this relationship relating these two things and in the fact it doesn't really relate them. You cannot get in space any occurrence which is logically of the same form as belief. When I say "logically of the same form" I mean that one can be obtained from the other by replacing the constituents of the one by the new terms. If I say "Desdemona loves Cassio" that is of the same form as "*A* is to the right of *B*." Those are of the same form, and I say that nothing that occurs in space is of the same form as belief. I have got on here to a new sort of thing, a new beast for our Zoo, not another member of our former species but a new species. The discovery of this fact is due to Mr. Wittgenstein.

There is a great deal that is odd about belief from a logical point of view. One of the things that are odd is that you can believe propositions of all sorts of forms. I can believe that "This is white" and that "Two and two are four." They are quite different forms, yet one can believe both. The actual occurrence can hardly be of exactly the same logical form in those two cases because of the great difference in the forms of the propositions believed. Therefore it would seem that belief cannot strictly be logically one in all different cases but must be distinguished according to the nature of the proposition that you believe. If you have "I believe *p*" and "I believe *q*" those two facts, if *p* and *q* are not of the same logical form, are not of the same logical form in the sense I was speaking of a moment ago, that is in the sense that from "I believe *p*" you can derive "I believe *q*" by replacing the constituents of one by the constituents of the other. That means that belief itself cannot be treated as being a proper sort of single term. Belief will really have to have different logical forms according to the nature of what is believed. So that the apparent sameness of believing in different cases is more or less illusory.

There are really two main things that one wants to notice in this matter that I am treating of just now. The first is the impossibility of treating the proposition believed as an independent entity, entering as a unit into the occurrence of the belief, and the other is the impossibility of putting the subordinate verb on a level with its terms as an object term in the belief.

That is a point in which I think that the theory of judgment which I set forth once in print some years ago was a little unduly simple, because I did then treat the object verb as if one could put it as just an object like the terms, as if one could put "loves" on a level with Desdemona and Cassio as a term for the relation "believe." That is why I have been laying such an emphasis in this lecture to-day on the fact that there are two verbs at least. I hope you will forgive the fact that so much of what I say to-day is tentative and consists of pointing out difficulties. The subject is not very easy and it has not been much dealt with or discussed. Practically nobody has until quite lately begun to consider the problem of the nature of belief with anything like a proper logical apparatus and therefore one has very little to help one in any discussion and so one has to be content on many points at present with pointing out difficulties rather than laying down quite clear solutions.

4. *The question of nomenclature.*

What sort of name shall we give to verbs like "believe" and "wish" and so forth? I should be inclined to call them "propositional verbs." This is merely a suggested name for convenience, because they are verbs which have the *form* of relating an object to a proposition. As I have been explaining, that is not what they really do, but it is convenient to call them propositional verbs. Of course you might call them "attitudes," but I should not like that because it is a psychological term, and although all the instances in our experience are psychological, there is no reason to suppose that all the verbs I am talking of are psychological. There is never any reason to suppose that sort of thing. One should always remember Spinoza's infinite attributes of Deity. It is quite likely that there are in the world the analogues of his infinite attributes. We have no acquaintance with them, but there is no reason to suppose that the mental and the physical exhaust the whole universe, so one can never say that all the instances of any logical sort of thing are of such and such a nature which is not a logical nature: you do not know enough about the world for that. Therefore I should not suggest that all the verbs that have the form exemplified by believing and willing are psychological. I can only say all I know are.

I notice that in my syllabus I said I was going to deal with truth and falsehood to-day, but there is not much to say about them specifically as they are coming in all the time. The thing one first thinks of as true or false is a proposition, and a proposition is nothing. But a belief is true or false in the same way as a proposition is, so that you do have facts in the world that are true or false. I said a while back that there was no distinction of true and false among facts, but as regards that special class of facts that we call "beliefs," there is, in that sense that a belief which occurs may be true or false, though it is equally a fact in either case. One *might* call wishes false in the same sense when one wishes something that does not happen. The truth or falsehood depends upon the proposition that enters in. I am inclined to think that perception, as opposed to belief, does go straight to the fact and

not through the proposition. When you perceive the fact you do not, of course, have error coming in, because the moment it is a fact that is your object error is excluded. I think that verification in the last resort would always reduce itself to the perception of facts. Therefore the logical form of perception will be different from the logical form of believing, just because of that circumstance that it is a *fact* that comes in. That raises also a number of logical difficulties which I do not propose to go into, but I think you can see for yourself that perceiving would also involve two verbs just as believing does. I am inclined to think that volition differs from desire logically, in a way strictly analogous to that in which perception differs from belief. But it would take us too far from logic to discuss this view.

V. GENERAL PROPOSITIONS AND EXISTENCE

I am going to speak to-day about general propositions and existence. The two subjects really belong together; they are the same topic, although it might not have seemed so at the first glance. The propositions and facts that I have been talking about hitherto have all been such as involved only perfectly definite particulars, or relations, or qualities, or things of that sort, never involved the sort of indefinite things one alludes to by such words as "all," "some," "a," "any," and it is propositions and facts of that sort that I am coming on to to-day.

Really all the propositions of the sort that I mean to talk of to-day collect themselves into two groups—the first that are about "all," and the second that are about "some." These two sorts belong together; they are each other's negations. If you say, for instance, "All men are mortal," that is the negative of "Some men are not mortal." In regard to general propositions, the distinction of affirmative and negative is arbitrary. Whether you are going to regard the propositions about "all" as the affirmative ones and the propositions about "some" as the negative ones, or *vice versa*, is purely a matter of taste. For example, if I say "I met no one as I came along," that, on the face of it, you would think is a negative proposition. Of course, that is really a proposition about "all," i.e., "All men are among those whom I did not meet." If, on the other hand, I say "I met a man as I came along," that would strike you as affirmative, whereas it is the negative of "All men are among those I did not meet as I came along." If you consider such propositions as "All men are mortal" and "Some men are not mortal," you might say it was more natural to take the general propositions as the affirmative and the existence-propositions as the negative, but, simply because it is quite arbitrary which one is to choose, it is better to forget these words and to speak only of general propositions and propositions asserting existence. All

general propositions deny the existence of something or other. If you say "All men are mortal," that denies the existence of an immortal man, and so on.

I want to say emphatically that general propositions are to be interpreted as not involving existence. When I say, for instance, "All Greeks are men," I do not want you to suppose that that implies that there are Greeks. It is to be considered emphatically as not implying that. That would have to be added as a separate proposition. If you want to interpret it in that sense, you will have to add the further statement "and there are Greeks." That is for purposes of practical convenience. If you include the fact that there are Greeks, you are rolling two propositions into one, and it causes unnecessary confusion in your logic, because the sorts of propositions that you want are those that do assert the existence of something and general propositions which do not assert existence. If it happened that there were no Greeks, both the proposition that "All Greeks are men" and the proposition that "No Greeks are men" would be true. The proposition "No Greeks are men" is, of course, the proposition "All Greeks are not-men." Both propositions will be true simultaneously if it happens that there are no Greeks. All statements about all the members of a class that has no members are true, because the contradictory of any general statement does assert existence and is therefore false in this case. This notion, of course, of general propositions not involving existence is one which is not in the traditional doctrine of the syllogism. In the traditional doctrine of the syllogism, it was assumed that when you have such a statement as "All Greeks are men," that implies that there are Greeks, and this produced fallacies. For instance, "All chimeras are animals, and all chimeras breathe flame, therefore some animals breathe flame." This is a syllogism in Darapti, but that mood of the syllogism is fallacious, as this instance shows. That was a point, by the way, which had a certain historical interest, because it impeded Leibniz in his attempts to construct a mathematical logic. He was always engaged in trying to construct such a mathematical logic as we have now, or rather such a one as Boole constructed, and he was always failing because of his respect for Aristotle. Whenever he invented a really good system, as he did several times, it always brought out that such moods as Darapti are fallacious. If you say "All A is B and all A is C , therefore some B is C "—if you say this you incur a fallacy, but he could not bring himself to believe that it was fallacious, so he began again. That shows you that you should not have too much respect for distinguished men.²

Now when you come to ask what really is asserted in a general proposition, such as "All Greeks are men" for instance, you find that what is asserted is the truth of all values of what I call a propositional function. A *propositional function* is simply *any expression containing an undetermined*

2. Cf. Couturat, *La logique de Leibniz*.

constituent, or several undetermined constituents, and becoming a proposition as soon as the undetermined constituents are determined. If I say “ x is a man” or “ n is a number,” that is a propositional function; so is any formula of algebra, say $(x + y)(x - y) = x^2 - y^2$. A propositional function is nothing, but, like most of the things one wants to talk about in logic, it does not lose its importance through that fact. The only thing really that you can do with a propositional function is to assert either that it is always true, or that it is sometimes true, or that it is never true. If you take:

“If x is a man, x is mortal,”

that is always true (just as much when x is not a man as when x is a man); if you take:

“ x is a man,”

that is sometimes true; if you take:

“ x is a unicorn,”

that is never true.

One may call a propositional function

necessary, when it is always true;

possible, when it is sometimes true;

impossible, when it is never true.

Much false philosophy has arisen out of confusing propositional functions and propositions. There is a great deal in ordinary traditional philosophy which consists simply in attributing to propositions the predicates which only apply to propositional functions, and, still worse, sometimes in attributing to individuals predicates which merely apply to propositional functions. This case of *necessary*, *possible*, *impossible*, is a case in point. In all traditional philosophy there comes a heading of “modality,” which discusses *necessary*, *possible*, and *impossible* as properties of propositions, whereas in fact they are properties of propositional functions. Propositions are only true or false.

If you take “ x is x ,” that is a propositional function which is true whatever “ x ” may be, i.e., a necessary propositional function. If you take “ x is a man,” that is a possible one. If you take “ x is a unicorn,” that is an impossible one.

Propositions can only be true or false, but propositional functions have these three possibilities. It is important, I think, to realize that the whole doctrine of modality only applies to propositional functions, not to propositions.

Propositional functions are involved in ordinary language in a great

many cases where one does not usually realize them. In such a statement as "I met a man," you can understand my statement perfectly well without knowing whom I met, and the actual person is not a constituent of the proposition. You are really asserting there that a certain propositional function is sometimes true, namely the propositional function "I met x and x is human." There is at least one value of x for which that is true, and that therefore is a possible propositional function. Whenever you get such words as "a," "some," "all," "every," it is always a mark of the presence of a propositional function, so that these things are not, so to speak, remote or recondite: they are obvious and familiar.

A propositional function comes in again in such a statement as "Socrates is mortal," because "to be mortal" means "to die at some time or other." You mean there is a time at which Socrates dies, and that again involves a propositional function, namely, that " t is a time, and Socrates dies at t " is possible. If you say "Socrates is immortal," that also will involve a propositional function. That means that "If t is any time whatever, Socrates is alive at time t ," if we take immortality as involving existence throughout the whole of the past as well as throughout the whole of the future. But if we take immortality as only involving existence throughout the whole of the future, the interpretation of "Socrates is immortal" becomes more complete, vis., "There is a time t , such that if t' is any time later than t , Socrates is alive at t' ." Thus when you come to write out properly what one means by a great many ordinary statements, it turns out a little complicated. "Socrates is mortal" and "Socrates is immortal" are not each other's contradictories, because they both imply that Socrates exists in time, otherwise he would not be either mortal or immortal. One says, "There is a time at which he dies," and the other says, "Whatever time you take, he is alive at that time," whereas the contradictory of "Socrates is mortal" would be true if there is not a time at which he lives.

An undetermined constituent in a propositional function is called a *variable*.

Existence. When you take any propositional function and assert of it that it is possible, that it is sometimes true, that gives you the fundamental meaning of "existence." You may express it by saying that there is at least one value of x for which that propositional function is true. Take " x is a man," there is at least one value of x for which this is true. That is what one means by saying that "There are men," or that "Men exist." Existence is essentially a property of a propositional function. It means that that propositional function is true in at least one instance. If you say "There are unicorns," that will mean that "There is an x , such that x is a unicorn." That is written in phrasing which is unduly approximated to ordinary language, but the proper way to put it would be " $(x$ is a unicorn) is possible." We have got to have some idea that we do not define, and one takes the idea of "always true," or of "sometimes true," as one's undefined idea in this

matter, and then you can define the other one as the negative of that. In some ways it is better to take them both as undefined, for reasons which I shall not go into at present. It will be out of this notion of *sometimes*, which is the same as the notion of *possible*, that we get the notion of existence. To say that unicorns exist is simply to say that " $(x \text{ is a unicorn})$ is possible."

It is perfectly clear that when you say "Unicorns exist," you are not saying anything that would apply to any unicorns there might happen to be, because as a matter of fact there are not any, and therefore if what you say had any application to the actual individuals, it could not possibly be significant unless it were true. You can consider the proposition "Unicorns exist" and can see that it is false. It is not nonsense. Of course, if the proposition went through the general conception of the unicorn to the individual, it could not be even significant unless there were unicorns. Therefore when you say "Unicorns exist," you are not saying anything about any individual things, and the same applies when you say "Men exist." If you say that "Men exist, and Socrates is a man, therefore Socrates exists," that is exactly the same sort of fallacy as it would be if you said "Men are numerous, Socrates is a man, therefore Socrates is numerous," because existence is a predicate of a propositional function, or derivatively of a class. When you say of a propositional function that it is numerous, you will mean that there are several values of x that will satisfy it, that there are more than one; or, if you like to take "numerous" in a larger sense, more than ten, more than twenty, or whatever number you think fitting. If x , y , and z all satisfy a propositional function, you may say that that proposition is numerous, but x , y , and z severally are not numerous. Exactly the same applies to existence, that is to say that the actual things that there are in the world do not exist, or, at least, that is putting it too strongly, because that is utter nonsense. To say that they do not exist is strictly nonsense, but to say that they do exist is also strictly nonsense.

It is of propositional functions that you can assert or deny existence. You must not run away with the idea that this entails consequences that it does not entail. If I say "The things that there are in the world exist," that is a perfectly correct statement, because I am there saying something about a certain class of things; I say it in the same sense in which I say "Men exist." But I must not go on to "This is a thing in the world, and therefore this exists." It is there the fallacy comes in, and it is simply, as you see, a fallacy of transferring to the individual that satisfies a propositional function a predicate which only applies to a propositional function. You can see this in various ways. For instance, you sometimes know the truth of an existence-proposition without knowing any instance of it. You know that there are people in Timbuctoo, but I doubt if any of you could give me an instance of one. Therefore you clearly can know existence-propositions without knowing any individual that makes them true. Existence-propositions do not say anything about the actual individual but only about the class of function.

It is exceedingly difficult to make this point clear as long as one adheres to ordinary language, because ordinary language is rooted in a certain feeling about logic, a certain feeling that our primeval ancestors had, and as long as you keep to ordinary language you find it very difficult to get away from the bias which is imposed upon you by language. When I say, e.g., "There is an x such that x is a man," that is not the sort of phrase one would like to use. "There is an x " is meaningless. What is "an x " anyhow? There is not such a thing. The only way you can really state it correctly is by inventing a new language *ad hoc*, and making the statement apply straight off to " x is a man," as when one says " $(x$ is a man) is possible," or invent a special symbol for the statement that " x is a man" is sometimes true.

I have dwelt on this point because it really is of very fundamental importance. I shall come back to existence in my next lecture: existence as it applies to descriptions, which is a slightly more complicated case than I am discussing here. I think an almost unbelievable amount of false philosophy has arisen through not realizing what "existence" means.

As I was saying a moment ago, a propositional function in itself is nothing: it is merely a schema. Therefore in the inventory of the world, which is what I am trying to get at, one comes to the question, What is there really in the world that corresponds with these things? Of course, it is clear that we have general *propositions*, in the same sense in which we have atomic propositions. For the moment I will include existence-propositions with general propositions. We have such propositions as "All men are mortal" and "Some men are Greeks." But you have not only such *propositions*; you have also such *facts*, and that, of course, is where you get back to the inventory of the world: that, in addition to particular facts, which I have been talking about in previous lectures, there are also general facts and existence-facts, that is to say, there are not merely *propositions* of that sort but also *facts* of that sort. That is rather an important point to realize. You cannot ever arrive at a general fact by inference from particular facts, however numerous. The old plan of complete induction, which used to occur in books, which was always supposed to be quite safe and easy as opposed to ordinary induction, that plan of complete induction, unless it is accompanied by at least one general proposition, will not yield you the result that you want. Suppose, for example, that you wish to prove in that way that "All men are mortal," you are supposed to proceed by complete induction, and say " A is a man that is mortal," " B is a man that is mortal," " C is a man that is mortal," and so on until you finish. You will not be able, in that way, to arrive at the proposition "All men are mortal" unless you know when you have finished. That is to say that, in order to arrive by this road at the general proposition "All men are mortal," you must already have the general proposition "All men are among those I have enumerated." You never can arrive at a general proposition by inference from particular propositions alone. You will always have to have at least

one general proposition in your premises. That illustrates, I think, various points. One, which is epistemological, is that if there is, as there seems to be, knowledge of general propositions, then there must be *primitive* knowledge of general propositions (I mean by that, knowledge of general propositions which is not obtained by inference), because if you can never infer a general proposition except from premises of which one at least is general, it is clear that you can never have knowledge of such propositions by inference unless there is knowledge of some general propositions which is not by inference. I think that the sort of way such knowledge—or rather the belief that we have such knowledge—comes into ordinary life is probably very odd. I mean to say that we do habitually assume general propositions which are exceedingly doubtful; as, for instance, one might, if one were counting up the people in this room, assume that one could see all of them, which is a general proposition, and very doubtful as there may be people under the tables. But, apart from that sort of thing, you do have in any empirical verification of general propositions some kind of assumption that amounts to this, that what you do not see is not there. Of course, you would not put it so strongly as that, but you would assume that, with certain limitations and certain qualifications, if a thing does not appear to your senses, it is not there. That is a general proposition, and it is only through such propositions that you arrive at the ordinary empirical results that one obtains in ordinary ways. If you take a census of the country, for instance, you assume that the people you do not see are not there, provided you search properly and carefully, otherwise your census might be wrong. It is some assumption of that sort which would underlie what seems purely empirical. You could not prove empirically that what you do not perceive is not there, because an empirical proof would consist in perceiving, and by hypothesis you do not perceive it, so that any proposition of that sort, if it is accepted, has to be accepted on its own evidence. I only take that as an illustration. There are many other illustrations one could take of the sort of propositions that are commonly assumed, many of them with very little justification.

I come now to a question which concerns logic more nearly, namely, the reasons for supposing that there are general facts as well as general propositions. When we were discussing molecular propositions I threw doubt upon the supposition that there are molecular facts, but I do not think one can doubt that there are general facts. It is perfectly clear, I think, that when you have enumerated all the atomic facts in the world, it is a further fact about the world that those are all the atomic facts there are about the world, and that is just as much an objective fact about the world as any of them are. It is clear, I think, that you must admit general facts as distinct from and over and above particular facts. The same thing applies to "All men are mortal." When you have taken all the particular men that there are, and found each one of them severally to be mortal, it is

definitely a new fact that all men are mortal; how new a fact, appears from what I said a moment ago, that it could not be inferred from the mortality of the several men that there are in the world. Of course, it is not so difficult to admit what I might call existence-facts—such facts as “There are men,” “There are sheep,” and so on. Those, I think, you will readily admit as separate and distinct facts over and above the atomic facts I spoke of before. Those facts have got to come into the inventory of the world, and in that way propositional functions come in as involved in the study of general facts. I do not profess to know what the right analysis of general facts is. It is an exceedingly difficult question, and one which I should very much like to see studied. I am sure that, although the convenient technical treatment is by means of propositional functions, that is not the whole of the right analysis. Beyond that I cannot go.

There is one point about whether there are molecular facts. I think I mentioned, when I was saying that I did not think there were disjunctive facts, that a certain difficulty does arise in regard to general facts. Take “All men are mortal.” That means:

“‘ x is a man’ implies
‘ x is a mortal’ whatever
 x may be.”

You can see at once that it is a hypothetical proposition. It does not imply that there are any men, nor who are men, and who are not; it simply says that if you have anything which is a man, that thing is mortal. As Mr. Bradley has pointed out in the second chapter of his *Principles of Logic*, “Trespassers will be prosecuted” may be true even if no one trespasses, since it means merely that, *if* anyone trespasses, he will be prosecuted. It comes down to this that

“‘ x is a man’ implies ‘ x is a mortal’ is always true,”

is a fact. It is perhaps a little difficult to see how that can be true if one is going to say that “‘Socrates is a man’ implies ‘Socrates is a mortal’” is not itself a fact, which is what I suggested when I was discussing disjunctive facts. I do not feel sure that you could not get round that difficulty. I only suggest it as a point which should be considered when one is denying that there are molecular facts, since, if it cannot be got round, we shall have to admit molecular facts.

Now I want to come to the subject of *completely general* propositions and propositional functions. By those I mean propositions and propositional functions that contain only variables and nothing else at all. This covers the whole of logic. Every logical proposition consists wholly and solely of

variables, though it is not true that every proposition consisting wholly and solely of variables is logical. You can consider stages of generalizations as, e.g.,

“Socrates loves Plato”

“ x loves Plato”

“ x loves y ”

“ x R y .”

There you have been going through a process of successive generalization. When you have got to xRy , you have got a schema consisting only of variables, containing no constants at all, the pure schema of dual relations, and it is clear that any proposition which expresses a dual relation can be derived from xRy by assigning values to x and R and y . So that that is, as you might say, the pure form of all those propositions. I mean by the form of a proposition that which you get when for every single one of its constituents you substitute a variable. If you want a different definition of the form of a proposition, you might be inclined to define it as the class of all those propositions that you can obtain from a given one by substituting other constituents for one or more of the constituents the proposition contains. E.g., in “Socrates loves Plato,” you can substitute somebody else for Socrates, somebody else for Plato, and some other verb for “loves.” In that way there are a certain number of propositions which you can derive from the proposition “Socrates loves Plato,” by replacing the constituents of that proposition by other constituents, so that you have there a certain class of propositions, and those propositions all have a certain form, and one can, if one likes, say that the form they all have is the class consisting of all of them. That is rather a provisional definition, because as a matter of fact, the idea of form is more fundamental than the idea of class. I should not suggest that as a really good definition, but it will do provisionally to explain the sort of thing one means by the form of a proposition. The form of a proposition is that which is in common between any two propositions of which the one can be obtained from the other by substituting other constituents for the original ones. When you have got down to those formulas that contain only variables, like xRy , you are on the way to the sort of thing that you can assert in logic.

To give an illustration, you know what I mean by the domain of a relation: I mean all the terms that have that relation to something. Suppose I say: “ xRy implies that x belongs to the domain of R ,” that would be a proposition of logic and is one that contains only variables. You might think it contains such words as “belong” and “domain,” but that is an error. It is only the habit of using ordinary language that makes those words appear. They are not really there. That is a proposition of pure logic. It does not mention any particular thing at all. This is to be understood as being as-

serted whatever x and R and y may be. All the statements of logic are of that sort.

It is not a very easy thing to see what are the constituents of a logical proposition. When one takes "Socrates loves Plato," "Socrates" is a constituent, "loves" is a constituent, and "Plato" is a constituent. Then you turn "Socrates" into x , "loves" into R , and "Plato" into y . x and R and y are nothing, and they are not constituents, so it seems as though all the propositions of logic were entirely devoid of constituents. I do not think that can quite be true. But then the only other thing you can seem to say is that the *form* is a constituent, that propositions of a certain form are always true: that *may* be the right analysis, though I very much doubt whether it is.

There is, however, just this to observe, viz., that the form of a proposition is never a constituent of that proposition itself. If you assert that "Socrates loves Plato," the form of that proposition is the form of the dual relation, but this is not a constituent of the proposition. If it were you would have to have that constituent related to the other constituents. You will make the form much too substantial if you think of it as really one of the things that have that form, so that the form of a proposition is certainly not a constituent of the proposition itself. Nevertheless it may possibly be a constituent of general statements about propositions that have that form, so I think it is *possible that* logical propositions might be interpreted as being about forms.

I can only say, in conclusion, as regards the constituents of logical propositions, that it is a problem which is rather new. There has not been much opportunity to consider it. I do not think any literature exists at all which deals with it in any way whatever, and it is an interesting problem.

I just want now to give you a few illustrations of propositions which can be expressed in the language of pure variables but are not propositions of logic. Among the propositions that are propositions of logic are included all the propositions of pure mathematics, all of which cannot only be expressed in logical terms but can also be deduced from the premises of logic, and therefore they are logical propositions. Apart from them there are many that can be expressed in logical terms, but cannot be proved from logic, and are certainly not propositions that form part of logic. Suppose you take such propositions as: "There is at least one thing in the world." That is a proposition that you can express in logical terms. It will mean, if you like, that the propositional function " $x = x$ " is a possible one. That is a proposition, therefore, that you can express in logical terms; but you cannot know from logic whether it is true or false. So far as you do know it, you know it empirically, because there might happen not to be a universe, and then it would not be true. It is merely an accident, so to speak, that there is a universe. The proposition that there are exactly 30,000 things in the world can also be expressed in purely logical terms, and is certainly not a proposition

of logic but an empirical proposition (true or false), because a world containing more than 30,000 things and a world containing fewer than 30,000 things are both possible, so that if it happens that there are exactly 30,000 things, that is what one might call an accident and is not a proposition of logic. There are again two propositions that one is used to in mathematical logic, namely, the multiplicative axiom and the axiom of infinity. These also can be expressed in logical terms, but cannot be proved or disproved by logic. In regard to the axiom of infinity, the impossibility of logical proof or disproof may be taken as certain, but in the case of the multiplicative axiom, it is perhaps still open to some degree to doubt. Everything that is a proposition of logic has got to be in some sense or other like a tautology. It has got to be something that has some peculiar quality, which I do not know how to define, that belongs to logical propositions and not to others. Examples of typical logical propositions are:

“If p implies q and q implies r , then p implies r .”

“If all a 's, are b 's and all b 's are c 's, then all a 's are c 's.”

“If all a 's are b 's, and x is an a , then x is a b .”

Those are propositions of logic. They have a certain peculiar quality which marks them out from other propositions and enables us to know them *a priori*. But what exactly that characteristic is, I am not able to tell you. Although it is a necessary characteristic of logical propositions that they should consist solely of variables, i.e., that they should assert the universal truth, or the sometimes-truth, of a propositional function consisting wholly of variables—although that is a necessary characteristic, it is not a sufficient one. I am sorry that I have had to leave so many problems unsolved. I always have to make this apology, but the world really is rather puzzling and I cannot help it.

¶ Discussion

—: Is there any word you would substitute for “existence” which would give existence to individuals? Are you applying the word “existence” to two ideas, or do you deny that there are two ideas?

Mr. Russell: No, there is not an idea that will apply to individuals. As regards the actual things there are in the world, there is nothing at all you can say about them that in any way corresponds to this notion of existence. It is a sheer mistake to say that there is anything analogous to existence that you can say about them. You get into confusion through language, because it is a perfectly correct thing to say “All the things in the world exist,” and it is so easy to pass from this to “This exists because it is a thing in the world.” There is no sort of point in a predicate which could not conceivably be

false. I mean, it is perfectly clear that, if there were such a thing as this existence of individuals that we talk of, it would be absolutely impossible for it not to apply, and that is the characteristic of a mistake.

VI. DESCRIPTIONS AND INCOMPLETE SYMBOLS

I am proposing to deal this time with the subject of descriptions, and what I call "incomplete symbols," and the existence of described individuals. You will remember that last time I dealt with the existence of *kinds* of things, what you mean by saying "There are men" or "There are Greeks" or phrases of that sort, where you have an existence which may be plural. I am going to deal to-day with an existence which is asserted to be singular, such as "The man with the iron mask existed" or some phrase of that sort, where you have some object described by the phrase "The so-and-so" in the singular, and I want to discuss the analysis of propositions in which phrases of that kind occur.

There are, of course, a great many propositions very familiar in metaphysics which are of that sort: "I exist" or "God exists" or "Homer existed," and other such statements are always occurring in metaphysical discussions, and are, I think, treated in ordinary metaphysics in a way which embodies a simple logical mistake that we shall be concerned with to-day, the same sort of mistake that I spoke of last week in connection with the existence of kinds of things. One way of examining a proposition of that sort is to ask yourself what would happen if it were false. If you take such a proposition as "Romulus existed," probably most of us think that Romulus did not exist. It is obviously a perfectly significant statement, whether true or false, to say that Romulus existed. If Romulus himself entered into our statement, it would be plain that the statement that he did not exist would be nonsense, because you cannot have a constituent of a proposition which is nothing at all. Every constituent has got to be there as one of the things in the world, and therefore if Romulus himself entered into the propositions that he existed or that he did not exist, both these propositions could not only not be true, but could not be even significant, unless he existed. That is obviously not the case, and the first conclusion one draws is that, although it *looks* as if Romulus were a constituent of that proposition, that is really a mistake. Romulus does not occur in the proposition "Romulus did not exist."

Suppose you try to make out what you do mean by that proposition. You can take, say, all the things that Livy has to say about Romulus, all the properties he ascribes to him, including the only one probably that most of us remember, namely, the fact that he was called "Romulus." You can put all this together, and make a propositional function saying "*x* has such-and-such properties," the properties being those you find enumerated in Livy.

There you have a propositional function, and when you say that Romulus did not exist you are simply saying that that propositional function is never true, that it is impossible in the sense I was explaining last time, i.e., that there is no value of x that makes it true. That reduces the non-existence of Romulus to the sort of non-existence I spoke of last time, where we had the non-existence of unicorns. But it is not a *complete* account of this kind of existence or non-existence, because there is one other way in which a described individual can fail to exist, and that is where the description applies to more than one person. You cannot, e.g., speak of "*The* inhabitant of London," not because there are none, but because there are so many.

You see, therefore, that this proposition "Romulus existed" or "Romulus did not exist" does introduce a propositional function, because the name "Romulus" is not really a name but a sort of truncated description. It stands for a person who did such-and-such things, who killed Remus, and founded Rome, and so on. It is short for that description; if you like, it is short for "the person who was called 'Romulus.'" If it were really a name, the question of existence could not arise, because a name has got to name something or it is not a name, and if there is no such person as Romulus there cannot be a name for that person who is not there, so that this single word "Romulus" is really a sort of truncated or telescoped description, and if you think of it as a name you will get into logical errors. When you realize that it is a description, you realize therefore that any proposition about Romulus really introduces the propositional function embodying the description, as (say) " x was called 'Romulus.'" That introduces you at once to a propositional function, and when you say "Romulus did not exist," you mean that this propositional function is not true for one value of x .

There are two sorts of descriptions, what one may call "ambiguous descriptions," when we speak of "*a* so-and-so," and what one may call "definite descriptions," when we speak of "*the* so-and-so" (in the singular). Instances are:

Ambiguous: A man, a dog, a pig, a Cabinet Minister.

Definite: The man with the iron mask.

The last person who came into this room.

The only Englishman who ever occupied the Papal See.

The number of the inhabitants of London.

The sum of 43 and 34.

(It is not necessary for a description that it should describe an individual: it may describe a predicate or a relation or anything else.)

It is phrases of that sort, definite descriptions, that I want to talk about to-day. I do not want to talk about ambiguous descriptions, as what there was to say about them was said last time.

I want you to realize that the question whether a phrase is a definite

description turns only upon its form, not upon the question whether there is a definite individual so described. For instance, I should call "The inhabitant of London" a definite description, although it does not in fact describe any definite individual.

The first thing to realize about a definite description is that it is not a name. We will take "The author of *Waverley*." That is a definite description, and it is easy to see that it is not a name. A name is a simple symbol (i.e., a symbol which does not have any parts that are symbols), a simple symbol used to designate a certain particular or by extension an object which is not a particular but is treated for the moment as if it were, or is falsely believed to be a particular, such as a person. This sort of phrase, "The author of *Waverley*," is not a name because it is a complex symbol. It contains parts which *are* symbols. It contains four words, and the meanings of those four words are already fixed and they have fixed the meaning of "The author of *Waverley*" in the only sense in which that phrase does have any meaning. In that sense, its meaning is already determinate, i.e., there is nothing arbitrary or conventional about the meaning of that whole phrase, when the meanings of "the," "author," "of," and "*Waverley*" have already been fixed. In that respect, it differs from "Scott," because when you have fixed the meaning of all the other words in the language, you have done nothing toward fixing the meaning of the name "Scott." That is to say, if you understand the English language, you would understand the meaning of the phrase "The author of *Waverley*" if you had never heard it before, whereas you would not understand the meaning of "Scott" if you had never heard the word before because to know the meaning of a name is to know who it is applied to.

You sometimes find people speaking as if descriptive phrases were names, and you will find it suggested, e.g., that such a proposition as "Scott is the author of *Waverley*" really asserts that "Scott" and the "the author of *Waverley*" are two names for the same person. That is an entire delusion; first of all, because "the author of *Waverley*" is not a name, and, secondly, because, as you can perfectly well see, if that were what is meant, the proposition would be one like "Scott is Sir Walter," and would not depend upon any fact except that the person in question was so called, because a name is what a man is called. As a matter of fact, Scott was the author of *Waverley* at a time when no one called him so, when no one knew whether he was or not, and the fact that he was the author was a physical fact, the fact that he sat down and wrote it with his own hand, which does not have anything to do with what he was called. It is in no way arbitrary. You cannot settle by any choice of nomenclature whether he is or is not to be the author of *Waverley*, because in actual fact he chose to write it and you cannot help yourself. That illustrates how "the author of *Waverley*" is quite a different thing from a name. You can prove this point very clearly by formal arguments. In "Scott is the author of *Waverley*" the "is," of course, ex-

presses identity, i.e., the entity whose name is Scott is identical with the author of *Waverley*. But, when I say "Scott is mortal" this "is," is the "is" of predication, which is quite different from the "is" of identity. It is a mistake to interpret "Scott is mortal" as meaning "Scott is identical with one among mortals," because (among other reasons) you will not be able to say what "mortals" are except by means of the propositional function " x is mortal," which brings back the "is" of predication. You cannot reduce the "is" of predication to the other "is." But the "is" in "Scott is the author of *Waverley*" is the "is" of identity and not of predication.³

If you were to try to substitute for "the author of *Waverley*" in that proposition any name whatever, say " c ," so that the proposition becomes "Scott is c ," then if " c " is a name for anybody who is not Scott, that proposition would become false, while if, on the other hand, " c " is a name for Scott, then the proposition will become simply a tautology. It is at once obvious that if " c " were "Scott" itself, "Scott is Scott" is just a tautology. But if you take any other name which is just a name for Scott, then if the name is being used *as* a name and not as a description, the proposition will still be a tautology. For the name itself is merely a means of pointing to the thing, and does not occur in what you are asserting, so that if one thing has two names, you make exactly the same assertion whichever of the two names you use, provided they are really names and not truncated descriptions.

So there are only two alternatives. If " c " is a name, the proposition "Scott is c " is either false or tautologous. But the proposition "Scott is the author of *Waverley*" is neither, and therefore is not the same as any proposition of the form "Scott is c ," where " c " is a name. That is another way of illustrating the fact that a description is quite a different thing from a name.

I should like to make clear what I was saying just now, that if you substitute another name in place of "Scott" which is also a name of the same individual, say, "Scott is Sir Walter," then "Scott" and "Sir Walter" are being used as names and not as descriptions, your proposition is strictly a tautology. If one asserts "Scott is Sir Walter," the way one would mean it would be that one was using the names as descriptions. One would mean that the person called "Scott" is the person called "Sir Walter," and "the person called 'Scott'" is a description, and so is "the person called 'Sir Walter.'" So that would not be a tautology. It would mean that the person called "Scott" is identical with the person called "Sir Walter." But if you are using both as names, the matter is quite different. You must observe that the name does not occur in that which you assert when you use the name. The name is merely that which is a means of expressing what it is you are trying to assert, and when I say "Scott wrote *Waverley*," the name "Scott" does not occur in the thing I am

3. The confusion of these two meanings of "is" is essential to the Hegelian conception of identity-in-difference.

asserting. The thing I am asserting is about the person, not about the name. So if I say "Scott is Sir Walter," using these two names *as* names, neither "Scott" nor "Sir Walter" occurs in what I am asserting, but only the person who has these names, and thus what I am asserting is a pure tautology.

It is rather important to realize this about the two different uses of names or of any other symbols: the one when you are talking about the symbol and the other when you are using it *as* a symbol, as a means of talking about something else. Normally, if you talk about your dinner, you are not talking about the word "dinner" but about what you are going to eat, and that is a different thing altogether. The ordinary use of words is as a means of getting through to things, and when you are using words in that way the statement "Scott is Sir Walter" is a pure tautology, exactly on the same level as "Scott is Scott."

That brings me back to the point that when you take "Scott is the author of *Waverley*" and you substitute for "the author of *Waverley*" a name in the place of a description, you get necessarily either a tautology or a falsehood—a tautology if you substitute "Scott" or some other name for the same person, and a falsehood if you substitute anything else. But the proposition itself is neither a tautology nor a falsehood, and that shows you that the proposition "Scott is the author of *Waverley*" is a different proposition from any that can be obtained if you substitute a name in the place of "the author of *Waverley*." That conclusion is equally true of any other proposition in which the phrase "the author of *Waverley*" occurs. If you take any proposition in which that phrase occurs and substitute for that phrase a proper name, whether that name be "Scott" or any other, you will get a different proposition. Generally speaking, if the name that you substitute is "Scott," your proposition, if it was true before will remain true, and if it was false before will remain false. But it is a *different* proposition. It is not *always* true that it will remain true or false, as may be seen by the example: "George IV wished to know if Scott was the author of *Waverley*." It is not true that George IV wished to know if Scott was Scott. So it is even the case that the truth or the falsehood of a proposition is sometimes changed when you substitute a name of an object for a description.

Identity is a rather puzzling thing at first sight. When you say "Scott is the author of *Waverley*," you are half-tempted to think there are two people, one of whom is Scott and the other the author of *Waverley*, and they happen to be the same. That is obviously absurd, but that is the sort of way one is always tempted to deal with identity.

When I say "Scott is the author of *Waverley*" and that "is" expresses identity, the reason that identity can be asserted there truly and without tautology is just the fact that the one is a name and the other a description. Or they might both be descriptions. If I say "The author of *Waverley* is the

author of *Marmion*," that, of course, asserts identity between two descriptions.

Now the next point that I want to make clear is that when a description (when I say "description" I mean, for the future, a *definite* description) occurs in a proposition, there is no constituent of that proposition corresponding to that description as a whole. In the true analysis of the proposition, the description is broken up and disappears. That is to say, when I say "Scott is the author of *Waverley*" it is a wrong analysis of that to suppose that you have there three constituents, "Scott," "is," and "the author of *Waverley*." That, of course, is the sort of way you might think of analyzing. You might admit that "the author of *Waverley*" was complex and could be further cut up, but you might think the proposition could be split into those three bits to begin with. That is an entire mistake. "The author of *Waverley*" is not a constituent of the proposition at all. There is no constituent really there corresponding to the descriptive phrase. I will try to prove that to you now.

The first and most obvious reason is that you can have significant propositions denying the existence of "the so-and-so." "The unicorn does not exist." "The greatest finite number does not exist." Propositions of that sort are perfectly significant, are perfectly sober, true, decent propositions, and that could not possibly be the case if the unicorn were a constituent of the proposition, because plainly it could not be a constituent as long as there were not any unicorns. Because the constituents of propositions, of course, are the same as the constituents of the corresponding facts, and since it is a fact that the unicorn does not exist, it is perfectly clear that the unicorn is not a constituent of that fact, because if there were any fact of which the unicorn was a constituent, there would be a unicorn, and it would not be true that it did not exist. That applies in this case of descriptions particularly. Now since it is possible for "the so-and-so" not to exist and yet for propositions in which "the so-and-so" occurs to be significant and even true, we must try to see what is meant by saying that the so-and-so does exist.

The occurrence of tense in verbs is an exceedingly annoying vulgarity due to our preoccupation with practical affairs. It would be much more agreeable if they had no tense, as I believe is the case in Chinese, but I do not know Chinese. You ought to be able to say "Socrates exists in the past," "Socrates exists in the present" or "Socrates exists in the future," or simply "Socrates exists," without any implication of tense, but language does not allow that, unfortunately. Nevertheless, I am going to use language in this tenseless way: when I say "The so-and-so exists," I am not going to mean that it exists in the present or in the past or in the future, but simply that it exists, without anything involving tense.

"The author of *Waverley* exists": there are two things required for that. First of all, what is "the author of *Waverley*"? It is the person who wrote

Waverley, i.e., we are coming now to this, that you have a propositional function involved, viz., “*x* writes *Waverley*,” and the author of *Waverley* is the person who writes *Waverley*, and in order that the person who writes *Waverley* may exist, it is necessary that this propositional function should have two properties:

1. It must be true for *at least* one *x*.
2. It must be true for *at most* one *x*.

If nobody had ever written *Waverley* the author could not exist, and if two people had written it, *the* author could not exist. So that you want these two properties, the one that it is true for at least one *x*, and the other that it is true for at most one *x*, both of which are required for existence.

The property of being true for at least one *x* is the one we dealt with last time: what I expressed by saying that the propositional function is *possible*. Then we come on to the second condition, that it is true for at most one *x*, and that you can express in this way: “If *x* and *y* wrote *Waverley*, then *x* is identical with *y*, whatever *x* and *y* may be.” That says that at most one wrote it. It does not say that anybody wrote *Waverley* at all, because if nobody had written it, that statement would still be true. It only says that at most one person wrote it.

The first of these conditions for existence fails in the case of the unicorn, and the second in the case of the inhabitant of London.

We can put these two conditions together and get a portmanteau expression including the meaning of both. You can reduce them both down to this, that: “(‘*x* wrote *Waverley*’ is equivalent to ‘*x* is *c*’ whatever *x* may be) is possible in respect of *c*.” That is as simple, I think, as you can make the statement.

You see that means to say that there is some entity *c*, we may not know what it is, which is such that when *x* is *c*, it is true that *x* wrote *Waverley*, and when *x* is not *c*, it is not true that *x* wrote *Waverley*, which amounts to saying that *c* is the only person who wrote *Waverley*; and I say there is a value of *c* which makes that true. So that this whole expression, which is a propositional function about *c*, is *possible* in respect of *c* (in the sense explained last time).

That is what I mean when I say that the author of *Waverley* exists. When I say “the author of *Waverley* exists,” I mean that there is an entity *c* such that “*x* wrote *Waverley*” is true when *x* is *c*, and is false when *x* is not *c*. “The author of *Waverley*” as a constituent has quite disappeared there, so that when I say “The author of *Waverley* exists” I am not saying anything about the author of *Waverley*. You have instead this elaborate to-do with propositional functions, and “the author of *Waverley*” has disappeared. That is why it is possible to say significantly “The author of *Waverley* did not

exist.” It would not be possible if “the author of *Waverley*” were a constituent of propositions in whose verbal expression this descriptive phrase occurs.

The fact that you can discuss the proposition “God exists” is a proof that “God,” as used in that proposition, is a description and not a name. If “God” were a name, no question as to existence could arise.

I have now defined what I mean by saying that a thing described exists. I have still to explain what I mean by saying that a thing described has a certain property. Supposing you want to say “The author of *Waverley* was human,” that will be represented thus: “(‘ x wrote *Waverley*’ is equivalent to ‘ x is c ’ whatever x may be, and c is human) is possible with respect to c .”

You will observe that what we gave before as the meaning of “The author of *Waverley* exists” is part of this proposition. It is part of any proposition in which “the author of *Waverley*” has what I call a “primary occurrence.” When I speak of a “primary occurrence” I mean that you are not having a proposition about the author of *Waverley* occurring as a part of some larger proposition, such as “I believe that the author of *Waverley* was human” or “I believe that the author of *Waverley* exists.” When it is a primary occurrence, i.e., when the proposition concerning it is not just part of a larger proposition, the phrase which we defined as the meaning of “The author of *Waverley* exists” will be part of that proposition. If I say the author of *Waverley* was human, or a poet, or a Scotsman, or whatever I say about the author of *Waverley* in the way of a primary occurrence, always this statement of his existence is part of the proposition. In that sense all these propositions that I make about the author of *Waverley* imply that the author of *Waverley* exists. So that any statement in which a description has a primary occurrence implies that the object described exists. If I say “The present King of France is bald,” that implies that the present King of France exists. If I say, “The present King of France has a fine head of hair,” that also implies that the present King of France exists. Therefore unless you understand how a proposition containing a description is to be denied, you will come to the conclusion that it is not true either that the present King of France is bald or that he is not bald, because if you were to enumerate all the things that are bald you would not find him there, and if you were to enumerate all the things that are not bald, you would not find him there either. The only suggestion I have found for dealing with that on conventional lines is to suppose that he wears a wig. You can only avoid the hypothesis that he wears a wig by observing that the denial of the proposition “The present King of France is bald” will not be “The present King of France is not bald,” if you mean by that “There is such a person as the King of France and that person is not bald.” The reason of this is that when you state that the present King of France is bald you say “There is a c such that c is now King of France and c is bald” and the denial is not “There is a c such that c is now

King of France and c is not bald." It is more complicated. It is: "Either there is not a c such that c is now King of France, or, if there is such a c , then c is not bald." Therefore you see that, if you want to deny the proposition "The present King of France is bald," you can do it by denying that he exists, instead of by denying that he is bald. In order to deny this statement that the present King of France is bald, which is a statement consisting of two parts, you can proceed by denying either part. You can deny the one part, which would lead you to suppose that the present King of France exists but is not bald, or the other part, which will lead you to the denial that the present King of France exists; and either of those two denials will lead you to the falsehood of the proposition "The present King of France is bald." When you say "Scott is human" there is no possibility of a double denial. The only way you can deny "Scott is human" is by saying "Scott is not human." But where a descriptive phrase occurs, you do have the double possibility of denial.

It is of the utmost importance to realize that "the so-and-so" does not occur in the analysis of propositions in whose verbal expression it occurs, that when I say "The author of *Waverley* is human," "the author of *Waverley*" is not the subject of that proposition, in the sort of way that Scott would be if I said "Scott is human," using "Scott" as a name. I cannot emphasize sufficiently how important this point is, and how much error you get into metaphysics if you do not realize that when I say "The author of *Waverley* is human" that is not a proposition of the same form as "Scott is human." It does not contain a constituent "the author of *Waverley*." The importance of that is very great for many reasons, and one of them is this question of existence. As I pointed out to you last time, there is a vast amount of philosophy that rests upon the notion that existence is, so to speak, a property that you can attribute to things, and that the things that exist have the property of existence and the things that do not exist do not. That is rubbish, whether you take kinds of things, or individual things described. When I say, e.g., "Homer existed," I am meaning by "Homer" some description, say "the author of the Homeric poems," and I am asserting that those poems were written by one man, which is a very doubtful proposition; but if you could get hold of the actual person who did actually write those poems (supposing there was such a person), to say of him that he existed would be uttering nonsense, not a falsehood but nonsense, because it is only of persons described that it can be significantly said that they exist. Last time I pointed out the fallacy in saying "Men exist, Socrates is a man, therefore Socrates exists." When I say "Homer exists, this is Homer, therefore this exists," that is a fallacy of the same sort. It is an entire mistake to argue: "This is the author of the Homeric poems and the author of the Homeric poems exists, therefore this exists." It is only where a propositional function comes in that existence may be significantly asserted. You can assert "The so-and-so

exists," meaning that there is just one *c* which has those properties, but when you get hold of a *c* that has them, you cannot say of this *c* that it exists, because that is nonsense: it is not false, but it has no meaning at all.

So the individuals that there are in the world do not exist, or rather it is nonsense to say that they exist and nonsense to say that they do not exist. It is not a thing you can say when you have named them, but only when you have described them. When you say "Homer exists," you mean "Homer" is a description which applies to something. A description when it is fully stated is always of the form "the so-and-so."

The sort of things that are like these descriptions in that they occur in words in a proposition, but are not in actual fact constituents of the proposition rightly analyzed, things of that sort I call "incomplete symbols." There are a great many sorts of incomplete symbols in logic, and they are sources of a great deal of confusion and false philosophy, because people get misled by grammar. You think that the proposition "Scott is mortal" and the proposition "The author of *Waverley* is mortal" are of the same form. You think that they are both simple propositions attributing a predicate to a subject. That is an entire delusion: one of them is (or rather might be) and one of them is not. These things, like "the author of *Waverley*," which I call incomplete symbols, are things that have absolutely no meaning whatsoever in isolation but merely acquire a meaning in a context. "Scott" taken as a name has a meaning all by itself. It stands for a certain person, and there it is. But "the author of *Waverley*" is not a name, and does not all by itself mean anything at all, because when it is rightly used in propositions, those propositions do not contain any constituent corresponding to it.

There are a great many other sorts of incomplete symbols besides descriptions. These are classes, which I shall speak of next time, and relations taken in extension, and so on. Such aggregations of symbols are really the same thing as what I call "logical fictions," and they embrace practically all the familiar objects of daily life: tables, chairs, Piccadilly, Socrates, and so on. Most of them are either classes, or series, or series of classes. In any case they are all incomplete symbols, i.e., they are aggregations that only have a meaning in use and do not have any meaning in themselves.

It is important, if you want to understand the analysis of the world, or the analysis of facts, or if you want to have any idea what there really is in the world, to realize how much of what there is in phraseology is of the nature of incomplete symbols. You can see that very easily in the case of "the author of *Waverley*" because "the author of *Waverley*" does not stand simply for Scott, nor for anything else. If it stood for Scott, "Scott is the author of *Waverley*" would be the same proposition as "Scott is Scott," which it is not, since George IV wished to know the truth of the one and did not wish to know the truth of the other. If "the author of *Waverley*" stood for anything other than Scott, "Scott is the author of *Waverley*" would be

false, which it is not. Hence you have to conclude that "the author of *Waverley*" does not, in isolation, really stand for anything at all; and that is the characteristic of incomplete symbols.

VII. THE THEORY OF TYPES AND SYMBOLISM: CLASSES

Before I begin to-day the main subject of my lecture, I should like to make a few remarks in explanation and amplification of what I have said about existence in my previous two lectures. This is chiefly on account of a letter I have received from a member of the class, raising many points which, I think, were present in other minds too.

The first point I wish to clear up is this: I did not mean to say that when one says a thing exists, one means the same as when one says it is possible. What I meant was, that the fundamental logical idea, the primitive idea, out of which both those are derived is the same. That is not quite the same thing as to say that the statement that a thing exists is the same as the statement that it is possible, which I do not hold. I used the word "possible" in perhaps a somewhat strange sense, because I wanted some word for a fundamental logical idea for which no word exists in ordinary language, and therefore if one is to try to express in ordinary language the idea in question, one has to take some word and make it convey the sense that I was giving to the word "possible," which is by no means the only sense that it has but is a sense that was convenient for my purpose. We say of a propositional function that it is possible, where there are cases in which it is true. That is not exactly the same thing as what one ordinarily means, for instance, when one says that it is possible it may rain to-morrow. But what I contend is, that the ordinary uses of the word "possible" are derived from this notion by a process. E.g., normally when you say of a proposition that it is possible you mean something like this: first of all it is implied that you do not know whether it is true or false; and I think it is implied, secondly, that it is one of a class of propositions, some of which are known to be true. When I say, e.g., "It is possible that it may rain to-morrow"—"It will rain to-morrow" is one of the class of propositions "It rains at time t ," where t is different times. We mean partly that we do not know whether it will rain or whether it will not, but also that we do know that that is the sort of proposition that is quite apt to be true, that it is a value of a propositional function of which we know some value to be true. Many of the ordinary uses of "possible" come under that head, I think you will find. That is to say, that if you say of a proposition that it is possible, what you have is this: "There is in this proposition some constituent, which, if you turn it into a variable, will give you a propositional function that is sometimes true." You ought not therefore to say of a proposition simply that it is possible, but rather that it is possible

in respect of such-and-such a constituent. That would be a more full expression.

When I say, for instance, that "Lions exist," I do not mean the same as if I said that lions were possible; because when you say "Lions exist," that means that the propositional function " x is a lion" is a possible one in the sense that there are lions, while when you say "Lions are possible" that is a different sort of statement altogether, not meaning that a casual individual animal may be a lion, but rather that a *sort* of animal may be the *sort* that we call "lions." If you say "Unicorns are possible," e.g., you would mean that you do not know any reason why there should not be unicorns, which is quite a different proposition from "Unicorns exist." As to what you would mean by saying that unicorns are possible, it would always come down to the same thing as "It is possible it may rain to-morrow." You would mean, the proposition "There are unicorns" is one of a certain set of propositions some of which are known to be true, and that the description of the unicorn does not contain in it anything that *shows* there could not be such beasts.

When I say a propositional function is possible, meaning there are cases in which it is true, I am consciously using the word "possible" in an unusual sense, because I want a single word for my fundamental idea, and cannot find any word in ordinary language that expresses what I mean.

Secondly, it is suggested that when one says a thing exists, it means that it is in time, or in time and space, at any rate in time. That is a very common suggestion, but I do not think that really there is much to be said for that use of the words; in the first place, because if that were all you meant, there would be no need for a separate word. In the second place, because after all in the sense, whatever that sense may be, in which the things are said to exist that one ordinarily regards as existing, one may very well wish to discuss the question whether there are things that exist without being in time. Orthodox metaphysics holds that whatever is really real is not in time, that to be in time is to be more or less unreal, and that what really exists is not in time at all. And orthodox theology holds that God is not in time. I see no reason why you should frame your definition of existence in such a way as to preclude that notion of existence. I am inclined to think that there are things that are not in time, and I should be sorry to use the word existence in that sense when you have already the phrase "being in time" which quite sufficiently expresses what you mean.

Another objection to that definition is, that it does not in the least fit the sort of use of "existence" which was underlying my discussion, which is the common one in mathematics. When you take existence-theorems, for instance, as when you say "An even prime exists," you do not mean that the number two is in time but that you can find a number of which you can say "This is even and prime." One does ordinarily in mathematics speak of propositions of that sort as existence-theorems, i.e., you establish that there is an object of such-and-such a sort, that object being, of course, in

mathematics a logical object, not a particular, not a thing like a lion or a unicorn, but an object like a function or a number, something which plainly does not have the property of being in time at all, and it is that sort of sense of existence-theorems that is relevant in discussing the meaning of existence as I was doing in the last two lectures. I do, of course, hold that that sense of existence can be carried on to cover the more ordinary uses of existence, and does in fact give the key to what is underlying those ordinary uses, as when one says that "Homer existed" or "Romulus did not exist," or whatever we may say of that kind.

I come now to a third suggestion about existence, which is also a not uncommon one, that of a given particular "this" you can say "This exists" in the sense that it is not a phantom or an image or a universal. Now I think that use of existence involves confusions which it is exceedingly important to get out of one's mind, really rather dangerous mistakes. In the first place, we must separate phantoms and images from universals; they are on a different level. Phantoms and images do undoubtedly exist in that sense, whatever it is, in which ordinary objects exist. I mean, if you shut your eyes and imagine some visual scene, the images that are before your mind while you are imagining are undoubtedly there. They are images, something is happening, and what is happening is that the images are before your mind, and these images are just as much part of the world as tables and chairs and anything else. They are perfectly decent objects, and you only call them unreal (if you call them so), or treat them as non-existent, because they do not have the usual sort of relations to other objects. If you shut your eyes and imagine a visual scene and you stretch out your hand to touch what is imagined, you won't get a tactile sensation, or even necessarily a tactile image. You will not get the usual correlation of sight and touch. If you imagine a heavy oak table, you can remove it without any muscular effort, which is not the case with oak tables that you actually see. The general correlations of your images are quite different from the correlations of what one chooses to call "real" objects. But that is not to say images are unreal. It is only to say they are not part of physics. Of course, I know that this belief in the physical world has established a sort of reign of terror. You have got to treat with disrespect whatever does not fit into the physical world. But that is really very unfair to the things that do not fit in. They are just as much there as the things that do. The physical world is a sort of governing aristocracy, which has somehow managed to cause everything else to be treated with disrespect. That sort of attitude is unworthy of a philosopher. We should treat with exactly equal respect the things that do not fit in with the physical world, and images are among them.

"Phantoms," I suppose, are intended to differ from "images" by being of the nature of hallucinations, things that are not merely imagined but that go with belief. They again are perfectly real; the only odd thing about them is their correlations. Macbeth sees a dagger. If he tried to touch it, he would

not get any tactile sensation, but that does not imply that he was not *seeing* a dagger, it only implies that he was not *touching* it. It does not in any way imply that the visual sensation was not there. It only means to say that the sort of correlation between sight and touch that we are used to is the normal rule but not a universal one. In order to pretend that it is universal, we say that a thing is unreal when it does not fit in. You say "Any man who is a man will do such-and-such a thing." You then find a man who will not, and you say, he is not a man. That is just the same sort of thing as with these daggers that you cannot touch.

I have explained elsewhere the sense in which phantoms are unreal.⁴ When you see a "real" man, the immediate object that you see is one of a whole system of particulars, all of which belong together and make up collectively the various "appearances" of the man to himself and others. On the other hand, when you see a phantom of a man, that is an isolated particular, not fitting into a system as does a particular which one calls an appearance of the "real" man. The phantom is in itself just as much part of the world as the normal sense-datum, but it lacks the usual correlation and therefore gives rise to false inferences and becomes deceptive.

As to universals, when I say of a particular that it exists, I certainly do not mean the same thing as if I were to say that it is not a universal. The statement concerning any particular that it is not a universal is quite strictly nonsense—not false, but strictly and exactly nonsense. You never can place a particular in the sort of place where a universal ought to be, and *vice versa*. If I say "*a* is not *b*," or if I say "*a* is *b*," that implies that *a* and *b* are of the same logical type. When I say of a universal that it exists, I should be meaning it in a different sense from that in which one says that particulars exist. E.g., you might say "Colors exist in the spectrum between blue and yellow." That would be a perfectly respectable statement, the colors being taken as universals. You mean simply that the propositional function "*x* is a color between blue and yellow" is one which is capable of truth. But the *x* which occurs there is not a particular, it is a universal. So that you arrive at the fact that the ultimate important notion involved in existence is the notion that I developed in the lecture before last, the notion of a propositional function being sometimes true, or being, in other words, possible. The distinction between what some people would call real existence, and existence in people's imagination or in my subjective activity, that distinction, as we have just seen, is entirely one of correlation. I mean that anything which appears to you, you will be mistakenly inclined to say has some more glorified form of existence if it is associated with those other things I was talking of in the way that the appearance of Socrates to you would be associated with his appearance to other people. You would say he was only in your imagination if there were not those other correlated appearances that you would naturally

4. See *Our Knowledge of the External World*, Chap. III. Also Section XII of "Sense-Data and Physics" in *Mysticism and Logic*.

expect. But that does not mean that the appearance to you is not exactly as much a part of the world as if there were other correlated appearances. It will be exactly as much a part of the real world, only it will fail to have the correlations that you expect. That applies to the question of sensation and imagination. Things imagined do not have the same sort of correlations as things sensed. If you care to see more about this question, I wrote a discussion in *The Monist* for January, 1915, and if any of you are interested, you will find the discussion there.

I come now to the proper subject of my lecture, but shall have to deal with it rather hastily. It was to explain the theory of types and the definition of classes. Now first of all, as I suppose most of you are aware, if you proceed carelessly with formal logic, you can very easily get into contradictions. Many of them have been known for a long time, some even since the time of the Greeks, but it is only fairly recently that it has been discovered that they bear upon mathematics, and that the ordinary mathematician is liable to fall into them when he approaches the realms of logic, unless he is very cautious. Unfortunately the mathematical ones are more difficult to expound, and the ones easy to expound strike one as mere puzzles or tricks.

You can start with the question whether or not there is a greatest cardinal number. Every class of thing that you can choose to mention has some cardinal number. That follows very easily from the definition of cardinal numbers as classes of similar classes, and you would be inclined to suppose that the class of all things there are in the world would have about as many members as a class could be reasonably expected to have. The plain man would suppose you could not get a larger class than the class of all the things there are in the world. On the other hand, it is very easy to prove that if you take selections of some of the members of a class, making those selections in every conceivable way that you can, the number of different selections that you can make is greater than the original number of terms. That is easy to see with small numbers. Suppose you have a class with just three numbers, a , b , c . The first selection that you can make is the selection of no terms. The next of a alone, b alone, c alone. Then bc , ca , ab , abc , which makes in all 8 (i.e., 2^3) selections. Generally speaking, if you have n terms, you can make 2^n selections. It is very easy to prove that 2^n is always greater than n , whether n happens to be finite or not. So you find that the total number of things in the world is not so great as the number of classes that can be made up out of those things. I am asking you to take all these propositions for granted, because there is not time to go into the proofs, but they are all in Cantor's work. Therefore you will find that the total number of things in the world is by no means the greatest number. On the contrary, there is a hierarchy of numbers greater than that. That, on the face of it, seems to land you in a contradiction. You have, in fact, a perfectly precise arithmetical proof that there are *fewer* things in heaven or earth than are dreamt of in *our* philosophy. That shows how philosophy advances.

You are met with the necessity, therefore, of distinguishing between classes and particulars. You are met with the necessity of saying that a class consisting of two particulars is not itself in turn a fresh particular, and that has to be expanded in all sorts of ways; i.e., you will have to say that in the sense in which there are particulars, in that sense it is not true to say there are classes. The sense in which there are classes is a different one from the sense in which there are particulars, because if the senses of the two were exactly the same, a world in which there are three particulars and therefore eight classes, would be a world in which there are at least eleven things. As the Chinese philosopher pointed out long ago, a dun cow and a bay horse makes three things: separately they are each one, and taken together they are another, and therefore three.

I pass now to the contradiction about classes that are not members of themselves. You would say generally that you would not expect a class to be a member of itself. For instance, if you take the class of all the teaspoons in the world, that is not in itself a teaspoon. Or if you take all the human beings in the world, the whole class of them is not in turn a human being. Normally you would say you cannot expect a whole class of things to be itself a member of that class. But there are apparent exceptions. If you take, e.g., all the things in the world that are not teaspoons and make up a class of them, that class obviously (you would say) will not be a teaspoon. And so generally with negative classes. And not only with negative classes, either, for if you think for a moment that classes are things in the same sense in which things are things, you will then have to say that the class consisting of all the things in the world is itself a thing in the world, and that therefore this class is a member of itself. Certainly you would have thought that it was clear that the class consisting of all the classes in the world is itself a class. That I think most people would feel inclined to suppose, and therefore you would get there a case of a class which is a member of itself. If there is any sense in asking whether a class is a member of itself or not, then certainly in all the cases of the ordinary classes of everyday life you find that a class is not a member of itself. Accordingly, that being so, you could go on to make up the class of all those classes that are not members of themselves, and you can ask yourself, when you have done that, is that class a member of itself or is it not?

Let us first suppose that it is a member of itself. In that case it is one of those classes that are not members of themselves, i.e., it is not a member of itself. Let us then suppose that it is not a member of itself. In that case it is not one of those classes that are not members of themselves, i.e., it is one of those classes that are members of themselves, i.e., it is a member of itself. Hence either hypothesis, that it is or that it is not a member of itself, leads to its contradiction. If it is a member of itself, it is not, and if it is not, it is.

That contradiction is extremely interesting. You can modify its form; some forms of modification are valid and some are not. I once had a form suggested to me which was not valid, namely the question whether the

barber shaves himself or not. You can define the barber as "one who shaves all those, and those only, who do not shave themselves." The question is, does the barber shave himself? In this form the contradiction is not very difficult to solve. But in our previous form I think it is clear that you can only get around it by observing that the whole question whether a class is or is not a member of itself is nonsense, i.e., that no class either is or is not a member of itself, and that it is not even true to say that, because the whole form of words is just a noise without meaning. That has to do with the fact that classes, as I shall be coming on to show, are incomplete symbols in the same sense in which the descriptions are that I was talking of last time; you are talking nonsense when you ask yourself whether a class is or is not a member of itself, because in any full statement of what is meant by a proposition which seems to be about a class, you will find that the class is not mentioned at all and that there is nothing about a class in that statement. It is absolutely necessary, if a statement about a class is to be significant and not pure nonsense, that it should be capable of being translated into a form in which it does not mention the class at all. This sort of statement, "Such-and-such a class is or is not a member of itself," will not be capable of that kind of translation. It is analogous to what I was saying about descriptions: the symbol for a class is an incomplete symbol; it does not really stand for part of the propositions in which symbolically it occurs, but in the right analysis of those propositions that symbol has been broken up and disappeared.

There is one other of these contradictions that I may as well mention, the most ancient, the saying of Epimenides that "All Cretans are liars." Epimenides was a man who slept for sixty years without stopping, and I believe that it was at the end of that nap that he made the remark that all Cretans were liars. It can be put more simply in the form: if a man makes the statement "I am lying," is he lying or not? If he is, that is what he said he was doing, so he is speaking the truth and not lying. If, on the other hand, he is not lying, then plainly he is speaking the truth in saying that he is lying, and therefore he is lying, since he says truly that that is what he is doing. It is an ancient puzzle, and nobody treated that sort of thing as anything but a joke until it was found that it had to do with such important and practical problems as whether there is a greatest cardinal or ordinal number. Then at last these contradictions were treated seriously. The man who says "I am lying" is really asserting "There is a proposition which I am asserting and which is false." That is presumably what you mean by lying. In order to get out the contradiction you have to take that whole assertion of his as one of the propositions to which his assertion applies; i.e., when he says "There is a proposition which I am asserting and which is false," the word "proposition" has to be interpreted as to include among propositions his statement to the effect that he is asserting a false proposition. Therefore you have to suppose that you have a certain totality, viz., that of propositions, but that that totality contains members which can only be defined in terms of itself. Be-

cause when you say "There is a proposition which I am asserting and which is false," that is a statement whose meaning can only be got by reference to the totality of propositions. You are not saying which among all the propositions there are in the world it is that you are asserting and that is false. Therefore it presupposes that the totality of propositions is spread out before you and that some one, though you do not say which, is being asserted falsely. It is quite clear that you get into a vicious circle if you first suppose that this totality of propositions is spread out before you, so that you can without picking any definite one say "Some one out of this totality is being asserted falsely," and that yet, when you have gone on to say "Some one out of this totality is being asserted falsely," that assertion is itself one of the totality you were to pick out from. That is exactly the situation you have in the paradox of the liar. You are supposed to be given first of all a set of propositions, and you assert that some one of these is being asserted falsely, then that assertion itself turns out to be one of the set, so that it is obviously fallacious to suppose the set already there in its entirety. If you are going to say anything about "all propositions," you will have to define propositions, first of all, in some such way as to exclude those that refer to all the propositions of the sort already defined. It follows that the word "proposition," in the sense in which we ordinarily try to use it, is a meaningless one, and that we have got to divide propositions up into sets and can make statements about all propositions in a given set, but those propositions will not themselves be members of the set. For instance, I may say "All atomic propositions are either true or false," but that itself will not be an atomic proposition. If you try to say "All propositions are either true or false," without qualification, you are uttering nonsense, because if it were not nonsense it would have to be itself a proposition and one of those included in its own scope, and therefore the law of excluded middle as enunciated just now is a meaningless noise. You have to cut propositions up into different types, and you can start with atomic propositions or, if you like, you can start with those propositions that do not refer to sets of propositions at all. Then you will take next those that refer to sets of propositions of that sort that you had first. Those that refer to sets of propositions of the first type, you may call the second type, and so on.

If you apply that to the person who says "I am lying," you will find that the contradiction has disappeared, because he will have to say what type of liar he is. If he says "I am asserting a false proposition of the first type," as a matter of fact that statement, since it refers to the totality of propositions of the first type, is of the second type. Hence it is not true that he is asserting a false proposition of the first type, and he remains a liar. Similarly, if he said he was asserting a false proposition of the 30,000th type, that would be a statement of the 30,001st type, so he would still be a liar. And the counter-argument to prove that he was also not a liar has collapsed.

You can lay it down that a totality of any sort cannot be a member of

itself. That applies to what we are saying about classes. For instance, the totality of classes in the world cannot be a class in the same sense in which they are. So we shall have to distinguish a hierarchy of classes. We will start with the classes that are composed entirely of particulars: that will be the first type of classes. Then we will go on to classes whose members are classes of the first type: that will be the second type. Then we will go on to classes whose members are classes of the second type: that will be the third type, and so on. Never is it possible for a class of one type either to be or not to be identical with a class of another type. That applies to the question I was discussing a moment ago, as to how many things there are in the world. Supposing there are three particulars in the world. There are then, as I was explaining, 8 classes of particulars. There will be 2^8 (i.e., 256) classes of classes of particulars, and 2^{256} classes of classes of classes of particulars, and so on. You do not get any contradiction arising out of that, and when you ask yourself the question: "Is there, or is there not a greatest cardinal number?" the answer depends entirely upon whether you are confining yourself within some one type, or whether you are not. Within any given type there is a greatest cardinal number, namely, the number of objects of that type, but you will always be able to get a larger number by going up to the next type. Therefore, there is no number so great but what you can get a greater number in a sufficiently high type. There you have the two sides of the argument: the one side when the type is given, the other side when the type is not given.

I have been talking, for brevity's sake, as if there really were all these different sorts of things. Of course, that is nonsense. There are particulars, but when one comes on to classes, and classes of classes, and classes of classes of classes, one is talking of logical fictions. When I say there are no such things, that again is not correct. It is not significant to say "There are such things," in the same sense of the words "there are" in which you can say "There are particulars." If I say "There are particulars" and "There are classes," the two phrases "there are" will have to have different meanings in those two propositions, and if they have suitable different meanings, both propositions may be true. If, on the other hand, the words "there are" are used in the same sense in both, then one at least of those statements must be nonsense, not false but nonsense. The question then arises, what is the sense in which one can say "There are classes," or in other words, what do you mean by a statement in which a class appears to come in? First of all, what are the sort of things you would like to say about classes? They are just the same as the sort of things you want to say about propositional functions. You want to say of a propositional function that it is sometimes true. That is the same thing as saying of a class that it has members. You want to say that it is true for exactly 100 values of the variables. That is the same as saying of a class that it has a hundred members. All the things you want to say about classes are the same as the things you want to say about propositional

functions excepting for accidental and irrelevant linguistic forms, with, however, a certain proviso which must now be explained.

Take, e.g., two propositional functions such as " x is a man," " x is a featherless biped." Those two are formally equivalent, i.e., when one is true so is the other, and *vice versa*. Some of the things that you can say about a propositional function will not necessarily remain true if you substitute another formally equivalent propositional function in its place. For instance, the propositional function " x is a man" is one which has to do with the concept of humanity. That will not be true of " x is a featherless biped." Or if you say, "so-and-so asserts that such-and-such is a man" the propositional function " x is a man" comes in there, but " x is a featherless biped" does not. There are a certain number of things which you can say about a propositional function which would be not true if you substitute another formally equivalent propositional function. On the other hand, any statement about a propositional function which will remain true or remain false, as the case may be, when you substitute for it another formally equivalent propositional function, may be regarded as being about the class which is associated with the propositional function. I want you to take the words *may be regarded* strictly. I am using them instead of *is*, because *is* would be untrue. "Extensional" statements about functions are those that remain true when you substitute any other formally equivalent function, and these are the ones that may be regarded as being about the class. If you have any statement about a function which is not extensional, you can always derive from it a somewhat similar statement which is extensional, viz., there is a function formally equivalent to the one in question about which the statement in question is true. This statement, which is manufactured out of the one you started with, will be extensional. It will always be equally true or equally false of any two formally equivalent functions, and this derived extensional statement may be regarded as being the corresponding statement about the associated class. So, when I say that "The class of men has so-and-so many members," that is to say "There are so-and-so many men in the world," that will be derived from the statement that " x is human" is satisfied by so-and-so many values of x , and in order to get it into the extensional form, one will put it in this way, that "There is a function formally equivalent to ' x is human,' which is true for so-and-so many values of x ." That I should define as what I mean by saying "The class of men has so-and-so many members." In that way you find that all the formal properties that you desire of classes, all their formal uses in mathematics, can be obtained without supposing for a moment that there are such things as classes, without supposing, that is to say, that a proposition in which symbolically a class occurs, does in fact contain a constituent corresponding to that symbol, and when rightly analyzed that symbol will disappear, in the same sort of way as descriptions disappear when the propositions are rightly analyzed in which they occur.

There are certain difficulties in the more usual view of classes, in addi-

tion to those we have already mentioned, that are solved by our theory. One of these concerns the null-class, i.e., the class consisting of no members, which is difficult to deal with on a purely extensional basis. Another is concerned with unit-classes. With the ordinary view of classes you would say that a class that has only one member was the same as that one member. That will land you in terrible difficulties, because in that case that one member is a member of that class, namely, itself. Take, e.g., the class of "Lecture audiences in Gordon Square."* That is obviously a class of classes, and probably it is a class that has only one member, and that one member itself (so far) has more than one member. Therefore if you were to identify the class of lecture audiences in Gordon Square with the only lecture audience that there is in Gordon Square, you would have to say both that it has one member and that it has twenty members, and you will be landed in contradictions, because this audience has more than one member, but the class of audiences in Gordon Square has only one member. Generally speaking, if you have any collection of many objects forming a class, you can make a class of which that class is the only member, and the class of which that class is the only member will have only one member, though this only member will have many members. This is one reason why you must distinguish a unit-class from its only member. Another is that, if you do not, you will find that the class is a member of itself, which is objectionable, as we saw earlier in this lecture. I have omitted a subtlety connected with the fact that two formally equivalent functions may be of different types. For the way of treating this point, see *Principia Mathematica*, p. 20, and Introduction, Chap. III.

I have not said quite all that I ought to have said on this subject. I meant to have gone a little more into the theory of types. The theory of types is really a theory of symbols, not of things. In a proper logical language it would be perfectly obvious. The trouble that there is arises from our inveterate habit of trying to name what cannot be named. If we had a proper logical language, we should not be tempted to do that. Strictly speaking, only particulars can be named. In that sense in which there are particulars, you cannot say either truly or falsely that there is anything else. The word "there is" is a word having "systematic ambiguity," i.e., having a strictly infinite number of different meanings which it is important to distinguish.

¶ Discussion

—: Could you lump all those classes, and classes of classes, and so on, together?

Mr. Russell: All are fictions, but they are different fictions in each case. When you say "There are classes of particulars," the statement "there are" wants expanding and explaining away, and when you have put down what

* These lectures were given in Gordon Square, London.

you really do mean, or ought to mean, you will find that it is something quite different from what you thought. That process of expanding and writing down fully what you mean, will be different if you go on to "There are classes of classes of particulars." There are infinite numbers of meanings to "there are." The first only is fundamental, so far as the hierarchy of classes is concerned.

—: I was wondering whether it was rather analogous to spaces, where the first three dimensions are actual, and the higher ones are merely symbolic. I see there is a difference, there are higher dimensions, but you can lump those together.

Mr. Russell: There is only one fundamental one, which is the first one, the one about particulars, but when you have gone to classes, you have traveled already just as much away from what there is as if you have gone to classes of classes. There are no classes really in the physical world. The particulars are there, but not classes. If you say "There is a universe" that meaning of "there is" will be quite different from the meaning in which you say "There is a particular," which means that "the propositional function 'x is a particular' is sometimes true."

All those statements are about symbols. They are never about the things themselves, and they have to do with "types." This is really important and I ought not to have forgotten to say it, that the relation of the symbol to what it means is different in different types. I am not now talking about this hierarchy of classes and so on, but the relation of a predicate to what it means is different from the relation of a name to what it means. There is not one single concept of "meaning" as one ordinarily thinks there is, so that you can say in a uniform sense "All symbols have meaning," but there are infinite numbers of different ways of meaning, i.e., different sorts of relation of the symbol to the symbolized, which are absolutely distinct. The relation, e.g., of a proposition to a fact, is quite different from the relation of a name to a particular, as you can see from the fact that there are two propositions always related to one given fact, and that is not so with names. That shows you that the relation that the proposition has to the fact is quite different from the relation of a name to a particular. You must not suppose that there is, over and above that, another way in which you could get at facts by naming them. You can always only get at the thing you are aiming at by the proper sort of symbol, which approaches it in the appropriate way. That is the real philosophical truth that is at the bottom of all this theory of types.

VIII. EXCURSUS INTO METAPHYSICS: WHAT THERE IS

I come now to the last lecture of this course, and I propose briefly to point to a few of the morals that are to be gathered from what has gone

before, in the way of suggesting the bearing of the doctrines that I have been advocating upon various problems of metaphysics. I have dwelt hitherto upon what one may call philosophical grammar, and I am afraid I have had to take you through a good many very dry and dusty regions in the course of that investigation, but I think the importance of philosophical grammar is very much greater than it is generally thought to be. I think that practically all traditional metaphysics is filled with mistakes due to bad grammar, and that almost all the traditional problems of metaphysics and traditional results—supposed results—of metaphysics are due to a failure to make the kind of distinctions in what we may call philosophical grammar with which we have been concerned in these previous lectures.

Take, as a very simple example, the philosophy of arithmetic. If you think that 1, 2, 3, and 4, and the rest of the numbers, are in any sense entities, if you think that there are objects, having those names, in the realm of being, you have at once a very considerable apparatus for your metaphysics to deal with, and you have offered to you a certain kind of analysis of arithmetical propositions. When you say, e.g., that 2 and 2 are 4, you suppose in that case that you are making a proposition of which the number 2 and the number 4 are constituents, and that has all sorts of consequences, all sorts of bearings upon your general metaphysical outlook. If there has been any truth in the doctrines that we have been considering, all numbers are what I call logical fictions. Numbers are classes of classes, and classes are logical fictions, so that numbers are, as it were, fictions at two removes, fictions of fictions. Therefore you do not have, as part of the ultimate constituents of your world, these queer entities that you are inclined to call numbers. The same applies in many other directions.

One purpose that has run through all that I have said, has been the justification of analysis, i.e., the justification of logical atomism, of the view that you can get down in theory, if not in practice, to ultimate simples, out of which the world is built, and that those simples have a kind of reality not belonging to anything else. Simples, as I tried to explain, are of an infinite number of sorts. There are particulars and qualities and relations of various orders, a whole hierarchy of different sorts of simples, but all of them, if we were right, have in their various ways some kind of reality that does not belong to anything else. The only other sort of object you come across in the world is what we call *facts*, and facts are the sort of things that are asserted or denied by propositions, and are not properly entities at all in the same sense in which their constituents are. That is shown in the fact that you cannot name them. You can only deny, or assert, or consider them, but you cannot name them because they are not there to be named, although in another sense it is true that you cannot know the world unless you know the facts that make up the truths of the world; but the knowing of facts is a different sort of thing from the knowing of simples.

Another purpose which runs through all that I have been saying is the

purpose embodied in the maxim called Occam's Razor. That maxim comes in, in practice, in this way: take some science, say physics. You have there a given body of doctrine, a set of propositions expressed in symbols—I am including words among symbols—and you think that you have reason to believe that on the whole those propositions, rightly interpreted, are fairly true, but you do not know what is the actual meaning of the symbols that you are using. The meaning they have *in use* would have to be explained in some pragmatic way: they have a certain kind of practical or emotional significance to you which is a datum, but the logical significance is not a datum, but a thing to be sought, and you go through, if you are analyzing a science like physics, these propositions with a view to finding out what is the smallest empirical apparatus—or the smallest apparatus, not necessarily wholly empirical—out of which you can build up these propositions. What is the smallest number of simple undefined things at the start, and the smallest number of undemonstrated premises, out of which you can define the things that need to be defined and prove the things that need to be proved? That problem, in any case that you like to take, is by no means a simple one, but on the contrary an extremely difficult one. It is one which requires a very great amount of logical technique; and the sort of thing that I have been talking about in these lectures is the preliminaries and first steps in that logical technique. You cannot possibly get at the solution of such a problem as I am talking about if you go at it in a straightforward fashion with just the ordinary acumen that one accumulates in the course of reading or in the study of traditional philosophy. You do need this apparatus of symbolical logic that I have been talking about. (The description of the subject as symbolical logic is an inadequate one. I should like to describe it simply as logic, on the ground that nothing else really is logic, but that would sound so arrogant that I hesitate to do so.)

Let us consider further the example of physics for a moment. You find, if you read the works of physicists, that they reduce matter down to certain elements—atoms, ions, corpuscles, or what not. But in any case the sort of thing that you are aiming at in the physical analysis of matter is to get down to very little bits of matter that still are just like matter in the fact that they persist through time, and that they travel about in space. They have in fact all the ordinary every-day properties of physical matter, not the matter that one has in ordinary life—they do not taste or smell or appear to the naked eye—but they have the properties that you very soon get to when you travel toward physics from ordinary life. Things of that sort, I say, are not the ultimate constituents of matter in any metaphysical sense. Those things are all of them, as I think a very little reflection shows, logical fictions in the sense that I was speaking of. At least, when I say they are, I speak somewhat too dogmatically. It is possible that there may be all these things that the physicist talks about in actual reality, but it is impossible that we should ever have any reason whatsoever for supposing that there are. That is the

situation that you arrive at generally in such analyses. You find that a certain thing which has been set up as a metaphysical entity can either be assumed dogmatically to be real, and then you will have no possible argument either for its reality or against its reality; or, instead of doing that, you can construct a logical fiction having the same formal properties, or rather having formally analogous formal properties to those of the supposed metaphysical entity and itself composed of empirically given things, and that logical fiction can be substituted for your supposed metaphysical entity and will fulfill all the scientific purposes that anybody can desire. With atoms and the rest it is so, with all the metaphysical entities whether of science or of metaphysics. By metaphysical entities I mean those things which are supposed to be part of the ultimate constituents of the world, but not to be the kind of thing that is ever empirically given—I do not say merely not being itself empirically given, but not being the *kind* of thing that is empirically given. In the case of matter, you can start from what is empirically given, what one sees and hears and smells and so forth, all the ordinary data, of sense, or you can start with some definite ordinary object, say this desk, and you can ask yourselves, "What do I mean by saying that this desk that I am looking at now is the same as the one I was looking at a week ago?" The first simple ordinary answer would be that it *is* the same desk, it is actually identical, there is a perfect identity of substance, or whatever you like to call it. But when that apparently simple answer is suggested, it is important to observe that you cannot have an empirical reason for such a view as that, and if you hold it, you hold it simply because you like it and for no other reason whatever. All that you really know is such facts as that what you see now, when you look at the desk, bears a very close similarity to what you saw a week ago when you looked at it. Rather more than that one fact of similarity I admit you know, or you may know. You might have paid some one to watch the desk continuously throughout the week, and might then have discovered that it was presenting appearances of the same sort all through that period, assuming that the light was kept on all through the night. In that way you could have established continuity. You have not in fact done so. You do not in fact know that that desk has gone on looking the same all the time, but we will assume that. Now the essential point is this: What is the empirical reason that makes you call a number of appearances, appearances of the same desk? What makes you say on successive occasions, I am seeing the same desk? The first thing to notice is this, that it does not matter what is the answer, so long as you have realized that the answer consists in something empirical and not in a recognized metaphysical identity of substance. There is something given in experience which makes you call it the same desk, and having once grasped that fact, you can go on and say, it is that something (whatever it is) that makes you call it the same desk which shall be *defined as constituting* it the same desk, and there shall be no assumption of a metaphysical substance which is identical

throughout. It is a little easier to the untrained mind to conceive of an identity than it is to conceive of a system of correlated particulars, hung one to another by relations of similarity and continuous change and so on. That idea is apparently more complicated, but that is what is empirically given in the real world, and substance, in the sense of something which is continuously identical in the same desk, is not given to you. Therefore in all cases where you seem to have a continuous entity persisting through changes, what you have to do is to ask yourself what makes you consider the successive appearances as belonging to one thing. When you have found out what makes you take the view that they belong to the same thing, you will then see that that which has made you say so, is all that is *certainly* there in the way of unity. Anything that there may be over and above that, I shall recognize as something I cannot know. What I can know is that there are a certain series of appearances linked together, and the series of those appearances I shall define as being a desk. In that way the desk is reduced to being a logical fiction, because a series is a logical fiction. In that way all the ordinary objects of daily life are extruded from the world of what there is, and in their place as what there is you find a number of passing particulars of the kind that one is immediately conscious of in sense. I want to make clear that I am not *denying* the existence of anything; I am only refusing to affirm it. I refuse to affirm the existence of anything for which there is no evidence, but I equally refuse to deny the existence of anything against which there is no evidence. Therefore I neither affirm nor deny it, but merely say, that is not in the realm of the knowable and is certainly not a part of physics; and physics, if it is to be interpreted, must be interpreted in terms of the sort of thing that can be empirical. If your atom is going to serve purposes in physics, as it undoubtedly does, your atom has got to turn out to be a construction, and your atom will in fact turn out to be a series of classes of particulars. The same process which one applies to physics, one will also apply elsewhere. The application to physics I explained briefly in my book on the *External World*, Chapters III and IV (Open Court Publishing Co., 1914).

I have talked so far about the unreality of the things we think real. I want to speak with equal emphasis about the reality of things we think unreal, such as phantoms and hallucinations. Phantoms and hallucinations, considered in themselves, are, as I explained in the preceding lectures, on exactly the same level as ordinary sense-data. They differ from ordinary sense-data only in the fact that they do not have the usual correlations with other things. In themselves they have the same reality as ordinary sense-data. They have the most complete and absolute and perfect reality that anything can have. They are part of the ultimate constituents of the world, just as the fleeting sense-data are. Speaking of the fleeting sense-data, I think it is very important to remove out of one's instincts any disposition to believe that the real is the permanent. There has been a metaphysical prejudice always that if

a thing is really real, it has to last either forever or for a fairly decent length of time. That is to my mind an entire mistake. The things that are really real last a very short time. Again I am not denying that there *may* be things that last forever, or for thousands of years; I only say that those are not within our experience, and that the real things that we know by experience last for a very short time, one tenth or half a second, or whatever it may be. Phantoms and hallucinations are among those, among the ultimate constituents of the world. The things that we call real, like tables and chairs, are systems, series of classes of particulars, and the particulars are the real things, the particulars being sense-data when they happen to be given to you. A table or chair will be a series of classes of particulars, and therefore a logical fiction. Those particulars will be on the same level of reality as a hallucination or a phantom. I ought to explain in what sense a chair is a series of classes. A chair presents at each moment a number of different appearances. All the appearances that it is presenting at a given moment make up a certain class. All those sets of appearances vary from time to time. If I take a chair and smash it, it will present a whole set of different appearances from what it did before, and without going as far as that, it will always be changing as the light changes, and so on. So you get a series in time of different sets of appearances, and that is what I mean by saying that a chair is a series of classes. That explanation is too crude, but I leave out the niceties, as that is not the actual topic I am dealing with. Now each single particular which is part of this whole system is linked up with the others in the system. Supposing, e.g., I take as my particular the appearance which that chair is presenting to me at this moment. That is linked up first of all with the appearance which the same chair is presenting to any one of you at the same moment, and with the appearance which it is going to present to me at later moments. There you get at once two journeys that you can take away from that particular, and that particular will be correlated in certain definite ways with the other particulars which also belong to that chair. That is what you mean by saying—or what you ought to mean by saying—that what I see before me is a real thing as opposed to a phantom. It means that it has a whole set of correlations of different kinds. It means that that particular, which is the appearance of the chair to me at this moment, is not isolated but is connected in a certain well-known familiar fashion with others, in the sort of way that makes it answer one's expectations. And so, when you go and buy a chair, you buy not only the appearance which it presents to you at that moment, but also those other appearances that it is going to present when it gets home. If it were a phantom chair, it would not present any appearances when it got home, and would not be the sort of thing you would want to buy. The sort one calls real is one of a whole correlated system, whereas the sort you call hallucinations are not. The respectable particulars in the world are all of them linked up with other particulars in respectable, conventional ways. Then sometimes you get a

wild particular, like a merely visual chair that you cannot sit on, and say it is a phantom, a hallucination, you exhaust all the vocabulary of abuse upon it. That is what one means by calling it unreal, because "unreal" applied in that way is a term of abuse and never would be applied to a thing that *was* unreal because you would not be so angry with it.

I will pass on to some other illustrations. Take a person. What is it that makes you say, when you meet your friend Jones, "Why, this is Jones"? It is clearly not the persistence of a metaphysical entity inside Jones somewhere, because even if there be such an entity, it certainly is not what you see when you see Jones coming along the street; it certainly is something that you are not acquainted with, not an empirical datum. Therefore plainly there is something in the empirical appearances which he presents to you, something in their relations one to another, which enables you to collect all these together and say, "These are what I call the appearances of one person," and that something that makes you collect them together is not the persistence of a metaphysical subject, because that, whether there be such a persistent subject or not, is certainly not a datum, and that which makes you say "Why, it is Jones" is a datum. Therefore Jones is not constituted as he is known by a sort of pin-point ego that is underlying his appearances, and you have got to find some correlations among the appearances which are of the sort that make you put all those appearances together and say, they are the appearances of one person. Those are different when it is other people and when it is yourself. When it is yourself, you have more to go by. You have not only what you look like, you have also your thoughts and memories and all your organic sensations, so that you have a much richer material and are therefore much less likely to be mistaken as to your own identity than as to some one else's. It happens, of course, that there are mistakes even as to one's own identity, in cases of multiple personality and so forth, but as a rule you will know that it is you because you have more to go by than other people have, and you would know it is you, not by a consciousness of the ego at all but by all sorts of things, by memory, by the way you feel and the way you look and a host of things. But all those are empirical data, and those enable you to say that the person to whom something happened yesterday was yourself. So you can collect a whole set of experiences into one string as all belonging to you, and similarly other people's experiences can be collected together as all belonging to them by relations that actually are observable and without assuming the existence of the persistent ego. It does not matter in the least to what we are concerned with, what exactly is the given empirical relation between two experiences that makes us say, "These are two experiences of the same person." It does not matter precisely what that relation is, because the logical formula for the construction of the person is the same whatever that relation may be, and because the mere fact that you can know that two experiences belong to the same person proves that there is such an empirical relation to be ascertained

by analysis. Let us call the relation *R*. We shall say that when two experiences have to each other the relation *R*, then they are said to be experiences of the same person. That is a definition of what I mean by "experiences of the same person." We proceed here just in the same way as when we are defining numbers. We first define what is meant by saying that two classes "have the same number," and then define what a number is. The person who has a given experience *x* will be the class of all those experiences which are "experiences of the same person" as the one who experiences *x*. You can say that two events are co-personal when there is between them a certain relation *R*, namely that relation which makes us say that they are experiences of the same person. You can define the person who has a certain experience as being those experiences that are co-personal with that experience, and it will be better perhaps to take them as a series than as a class, because you want to know which is the beginning of a man's life and which is the end. Therefore we shall say that a person is a certain series of experiences. We shall not deny that there may be a metaphysical ego. We shall merely say that it is a question that does not concern us in any way, because it is a matter about which we know nothing and can know nothing, and therefore it obviously cannot be a thing that comes into science in any way. What we know is this string of experiences that makes up a person, and that is put together by means of certain empirically given relations, such, e.g., as memory.

I will take another illustration, a kind of problem that our method is useful in helping to deal with. You all know the American theory of neutral monism, which derives really from William James and is also suggested in the work of Mach, but in a rather less developed form. The theory of neutral monism maintains that the distinction between the mental and the physical is entirely an affair of arrangement, that the actual material arranged is exactly the same in the case of the mental as it is in the case of the physical, but they differ merely in the fact that when you take a thing as belonging in the same context with certain other things, it will belong to psychology, while when you take it in a certain other context with other things, it will belong to physics, and the difference is as to what you consider to be its context, just the same sort of difference as there is between arranging the people in London alphabetically or geographically. So, according to William James, the actual material of the world can be arranged in two different ways, one of which gives you physics and the other psychology. It is just like rows or columns: in an arrangement of rows and columns, you can take an item as either a member of a certain row or a member of a certain column; the item is the same in the two cases, but its context is different.

If you will allow me a little undue simplicity I can go on to say rather more about neutral monism, but you must understand that I am talking more simply than I ought to do because there is not time to put in all the shadings and qualifications. I was talking a moment ago about the appear-

ances that a chair presents. If we take any one of these chairs, we can all look at it, and it presents a different appearance to each of us. Taken all together, taking all the different appearances that that chair is presenting to all of us at this moment, you get something that belongs to physics. So that, if one takes sense-data and arranges together all those sense-data that appear to different people at a given moment and are such as we should ordinarily say are appearances of the same physical object, then that class of sense-data will give you something that belongs to physics, namely, the chair at this moment. On the other hand, if instead of taking all the appearances that that chair presents to all of us at this moment, I take all the appearances that the different chairs in this room present to me at this moment, I get quite another group of particulars. All the different appearances that different chairs present to me now will give you something belonging to psychology, because that will give you my experiences at the present moment. Broadly speaking, according to what one may take as an expansion of William James, that should be the definition of the difference between physics and psychology.

We commonly assume that there is a phenomenon which we call seeing the chair, but what I call my seeing the chair according to neutral monism is merely the existence of a certain particular, namely the particular which is the sense-datum of that chair at that moment. And I and the chair are both logical fictions, both being in fact a series of classes of particulars, of which one will be that particular which we call my seeing the chair. That actual appearance that the chair is presenting to me now is a member of me and a member of the chair, I and the chair being logical fictions. That will be at any rate a view that you can consider if you are engaged in vindicating neutral monism. There is no simple entity that you can point to and say: this entity is physical and not mental. According to William James and neutral monists that will not be the case with any simple entity that you may take. Any such entity will be a member of physical series and a member of mental series. Now I want to say that if you wish to test such a theory as that of neutral monism, if you wish to discover whether it is true or false, you cannot hope to get any distance with your problem unless you have at your fingers' end the theory of logic that I have been talking of. You never can tell otherwise what can be done with a given material, whether you can concoct out of a given material the sort of logical fictions that will have the properties you want in psychology and in physics. That sort of thing is by no means easy to decide. You can only decide it if you really have a very considerable technical facility in these matters. Having said that, I ought to proceed to tell you that I have discovered whether neutral monism is true or not, because otherwise you may not believe that logic is any use in the matter. But I do not profess to know whether it is true or not. I feel more and more inclined to think that it may be true. I feel more and more that the difficulties that occur in regard to it are all of the sort that may be solved by ingenuity. But nevertheless there *are* a number of difficulties; there

are a number of problems, some of which I have spoken about in the course of these lectures. One is the question of belief and the other sorts of facts involving two verbs. If there are such facts as this, that, I think, may make neutral monism rather difficult, but as I was pointing out, there is the theory that one calls behaviorism, which belongs logically with neutral monism, and that theory would altogether dispense with those facts containing two verbs, and would therefore dispose of that argument against neutral monism. There is, on the other hand, the argument from emphatic particulars, such as "this" and "now" and "here" and such words as that, which are not very easy to reconcile, to my mind, with the view which does not distinguish between a particular and experiencing that particular. But the argument about emphatic particulars is so delicate and so subtle that I cannot feel quite sure whether it is a valid one or not, and I think the longer one pursues philosophy, the more conscious one becomes how extremely often one has been taken in by fallacies, and the less willing one is to be quite sure that an argument is valid if there is anything about it that is at all subtle or elusive, at all difficult to grasp. That makes me a little cautious and doubtful about all these arguments, and therefore although I am quite sure that the question of the truth or falsehood of neutral monism is not to be solved except by these means, yet I do not profess to know whether neutral monism is true or is not. I am not without hopes of finding out in the course of time, but I do not profess to know yet.

As I said earlier in this lecture, one thing that our technique does, is to give us a means of constructing a given body of symbolic propositions with the minimum of apparatus, and every diminution in apparatus diminishes the risk of error. Suppose, e.g., that you have constructed your physics with a certain number of entities and a certain number of premises; suppose you discover that by a little ingenuity you can dispense with half of those entities and half of those premises, you clearly have diminished the risk of error, because if you had before 10 entities and 10 premises, then the 5 you have now would be all right, but it is not true conversely that if the 5 you have now are all right, the 10 must have been. Therefore you diminish the risk of error with every diminution of entities and premises. When I spoke about the desk and said I was not going to assume the existence of a persistent substance underlying its appearances, it is an example of the case in point. You have anyhow the successive appearances, and if you can get on without assuming the metaphysical and constant desk, you have a smaller risk of error than you had before. You would not necessarily have a smaller risk of error if you were tied down to *denying* the metaphysical desk. That is the advantage of Occam's Razor, that it diminishes your risk of error. Considered in that way you may say that the whole of our problem belongs rather to science than to philosophy. I think perhaps that is true, but I believe the only difference between science and philosophy is that science is what you more or less know and philosophy is what you do not know. Philosophy is that part of science which at present people choose to have

opinions about, but which they have no knowledge about. Therefore every advance in knowledge robs philosophy of some problems which formerly it had, and if there is any truth, if there is any value in the kind of procedure of mathematical logic, it will follow that a number of problems which had belonged to philosophy will have ceased to belong to philosophy and will belong to science. And of course the moment they become soluble, they become to a large class of philosophical minds uninteresting, because to many of the people who like philosophy, the charm of it consists in the speculative freedom, in the fact that you can play with hypotheses. You can think out this or that which *may* be true, which is a very valuable exercise until you discover what *is* true; but when you discover what is true the whole fruitful play of fancy in that region is curtailed, and you will abandon that region and pass on. Just as there are families in America who from the time of the Pilgrim Fathers onward had always migrated westward, toward the backwoods, because they did not like civilized life, so the philosopher has an adventurous disposition and likes to dwell in the region where there are still uncertainties. It is true that the transferring of a region from philosophy into science will make it distasteful to a very important and useful type of mind. I think that is true of a good deal of the applications of mathematical logic in the directions that I have been indicating. It makes it dry, precise, methodical, and in that way robs it of a certain quality that it had when you could play with it more freely. I do not feel that it is my place to apologize for that, because if it is true, it is true. If it is not true, of course, I do owe you an apology; but if it is, it is not my fault, and therefore I do not feel I owe any apology for any sort of dryness or dullness in the world. I would say this, too, that for those who have any taste for mathematics, for those who like symbolic constructions, that sort of world is a very delightful one, and if you do not find it otherwise attractive, all that is necessary to do is to acquire a taste for mathematics, and then you will have a very agreeable world, and with that conclusion I will bring this course of lectures to an end.

Selected Bibliography

Russell's output has been enormous, and at the age of ninety he is still publishing. Here we can do no more than pick the most significant items from the corpus. *Principles of Mathematics*, Cambridge, Cambridge University

Press, 1903, was Russell's first major philosophical work. It sets forth a Platonistic philosophy of mathematics, embodying the sort of extreme realism that Russell and Moore, in their revolt from idealism, embraced at this time. In the Preface to the 2nd edition, New York, W. W. Norton & Company, Inc., 1938, Russell sets forth his later disenchantment with this position. For a nonmathematical exposition of Russell's early realism see "Meinong's Theory of Complexes and Assumptions," *Mind*, 13 (1904). Russell's criticisms of the idealist theory of truth is to be found in "The Monistic Theory of Truth" (1906), reprinted in *Philosophical Essays*, New York, Longmans, Green, & Co., 1910. See also the criticisms of pragmatism in this volume.

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tively systematic presentation in *Human Knowledge, Its Scope and Limits*, New York, Simon & Schuster, Inc., 1948. Russell's writings on ethics, politics, and religion have been regarded by the author himself as occupying a less exalted status than the foregoing, but they are by no means devoid of interest. "The Elements of Ethics" (1908), reprinted in *Philosophical Essays*, presents a Moore-like intuitionist position, which Russell later abandoned under the pressure of criticism from Santayana. His later position comes to fullest expression in *Human Society in Ethics and Politics*, New York, Simon and Schuster, Inc., 1955.

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The Philosophy of Bertrand Russell contains a number of excellent critical discussions of Russell's philosophy, particularly M. Weitz, "Analysis and the Unity of Russell's Philosophy"; G. E. Moore, "Russell's Theory of Descriptions"; M. Black, "Russell's Philosophy of Language"; E. Nagel, "Russell's Philosophy of Science"; W. T. Stace, "Russell's Neutral Monism"; and R. M. Chisholm, "Russell on the Foundations of Empirical Knowledge." Russell's replies in this volume are also well worth consulting. This volume also contains a bibliography of Russell's writings to 1945.

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part VIII

LOGICAL POSITIVISM

Introduction

Logical positivism, the *enfant terrible* of twentieth-century philosophy, began around 1922 with the meetings of a group subsequently known as the "Vienna Circle." Until 1936, when its leading exponents had either died or dispersed abroad, the movement shook the philosophical world into intense partisan controversy. By now as a movement logical positivism is dead, but not like the dodo. Its early excesses have been toned down by its best surviving representatives, chief among whom is Carnap. These early excesses were the energetic outbursts of serious, intelligent, technically well-equipped men. The positivists left an indelible mark on modern analytic philosophy. Even their mortal enemies, the speculative metaphysicians, have been somewhat chastened by the positivists' powerful attacks.

The two most important figures of logical positivism are Moritz Schlick (1882–1936) and Rudolf Carnap (1891–). Carnap's "left wing" version of positivism became the generally recognized image of the movement. During the heyday period of 1926–1936, Carnap alone tried to work out in detail a completely consistent logical positivism. His work, though less judicious than Schlick's, was on that account much more exciting and original.

A letter of Professor Carnap's contains the following historical remarks:

Until 1926 I worked completely on my own in a small village in Germany. I started out on my philosophical road, strongly influenced by Russell and Frege (my teacher). My aim was the application of modern logic for the analysis of scientific concepts and the clarification of philosophical problems. I was not at all thinking of a philosophical movement. My early publications are concerned with topics in the foundations of physics (as was my Ph.D. thesis on space), a textbook on symbolic logic (stressing particularly its applications). The largest part of my time in these early years, however, was devoted to writing *Der Logische Aufbau der Welt*¹; the manuscript was finished when I came to Vienna in 1926.

Although Wittgenstein had a strong influence on the Vienna Circle, it is often overrated. . . . He influenced most deeply Schlick and Waismann, but me and Neurath a good deal less. I would say that I owe much more to Russell than to Wittgenstein.

Although Carnap put the stamp of his own positivism upon the recognized image of the movement, Schlick was its catalyst. In 1922, Schlick was appointed Professor of Philosophy in Vienna University. The appointment was initiated by a group of scientists, led by Hans Hahn. Schlick had been trained in physics, having written a doctoral dissertation on light under Planck. He had close personal ties with Planck, Einstein, and Hilbert. In 1917, he had published *Raum und Zeit in der gegenwaertigen Physik* (*Space and Time in Contemporary Physics*) and in 1918, *Allgemeine Erkenntnislehre* (*General Theory of Knowledge*). It was his already established reputation as a philosopher of science that led to Schlick's appointment in Vienna. Around this physicist become professional philosopher there flocked immediately upon his arrival in Vienna a number of philosophers and mathematicians. Outstanding among the philosophers were Herbert Feigl, Victor Kraft, and Friedrich Waismann and among the mathematicians there were Kurt Gödel, Hans Hahn, and Karl Menger. Otto Neurath, who regarded himself as a social scientist, was a prominent member of this group. Carnap joined it in 1926. At about the same time a similar though less influential group was forming itself around Hans Reichenbach in Berlin. The one thing that these people in the Vienna and Berlin groups had in common was their disdain of scientifically untaught philosophers who made pontifical pronouncements about knowledge and science.

From 1922 to 1929, the Vienna group met for frequent philosophical discussion. By 1918, Wittgenstein had written the *Tractatus*, the most radical statement of logical atomism. Wittgenstein lived near Vienna for a time after the first war, and although he never personally took any part in the meetings of the Vienna group, some of its members had occasional contact with him. They studied his *Tractatus* extremely thoroughly. The *Tractatus* was a strong influence in the shaping of logical positivism. Much of Carnap's work in the period between 1926–1934 is an attempt to make the logical atomism of the *Tractatus* into a consistent positivism. In 1929, the Vienna group had become sufficiently integrated to christen itself the "Vienna Circle" and to declare itself a school with a definite program and a published manifesto, *Scientific World-View: The Vienna Circle*. Its members organized congresses, established contact with like-minded philosophers in Poland, Britain, and the United States. In 1930, Carnap and Reichenbach began jointly editing *Erkenntnis* which was

the chief medium of disseminating the ideas of logical positivists. By 1936, the movement lost its initial momentum. Philosophically, the logical positivists ceased to dominate the scene. Physically, the Vienna Circle dissolved. Hahn had died in 1934, two years before Schlick was killed by a demented student. The authoritarian regimes of Dolfuss and Schuschnigg were unbearable to the rest of the Vienna Circle. Gödel, Menger, Carnap, and Feigl eventually came to the United States. Waismann went to Oxford where he died in 1959.

Logical positivism is a type of empiricism. The logical positivists deliberately chose the qualifying term "logical" in order to indicate that they were doing logical analysis rather than propounding theses about ultimate reality or giving psychological accounts of the origin of our ideas and the laws of their association. According to Carnap, "The function of logical analysis is to analyze all knowledge, all assertions of science and everyday life, in order to make clear the sense of each such assertion and the connections between them." The word "positivism" relates this movement to traditional empiricism. One recurrent theme of traditional empiricism is that all theoretically significant propositions are based upon sense perception. This is intended to be a criterion of theoretical intelligibility. But the word "significant" also means worth serious consideration. Empiricism in one breath lays down its criterion of theoretical intelligibility and passes judgment on whatever fails to meet that criterion. There is, however, a class of true propositions, those of logic and mathematics, which empiricists regard as worthy of serious consideration but which they could not plausibly subject to their own criterion of theoretical intelligibility. Mill's theory that the truths of logic and mathematics are extraordinarily well-supported inductive generalizations from sense experience did not satisfy most empiricists as an account of the sort of necessity that logical and mathematical truths appear to have.

The way out of the impasse, as far as the logical positivists were concerned, appeared to be provided by the logistic thesis of *Principia Mathematica* that mathematics is reducible to logic, and by Wittgenstein's addendum in the *Tractatus*, that logical truths are tautologies devoid of factual content. Now the logical positivists could say that all significant theoretical propositions are based upon sense perception, except the factually empty tautologies that exhaust and are exhausted by the truths of logic and mathematics.

The characteristic tenet of logical positivism is the verifiability criterion of factual meaning. According to the verifiability criterion, the factual meaning of a sentence is the method of its verification. In other words, to understand what a factual sentence means is to know what fact would support it and what fact would fail to support it, provided that nothing is admitted to be fact except what can be observed by the senses. Verification in turn was said to be direct, as in the case of "this is a blue square" or indirect, as in the case of "gases are collections of molecules."

The central idea of the verifiability criterion is not original with logical positivism. C. S. Peirce's pragmatic conception of "intellectual meaning" and Einstein's operationalism (the term was coined by P. W. Bridgman) came earlier than positivism. Although Peirce's conception antedates Einstein's by about twenty-five years, operationalism did not take hold in physics until after Einstein had built it into the very fabric of relativity theory. Einstein did this

by so defining the concept of simultaneity that whether or not two events are simultaneous could be decided by observing the results of carrying out certain operations.² Einstein justified his recommendation that physicists work with operational concepts on the ground that otherwise the point of scientific work, namely, to give intersubjectively decidable answers to questions about nature, would be frustrated. The positivistic criterion of factual meaning is closely related to pragmatism and operationalism, but the positivists, unlike Einstein and Peirce, used their criterion as a major weapon against metaphysics. Regarding as metaphysical all claims to knowing something about matters that in principle no sense experience could confirm or deny, the positivists argued that metaphysics has no theoretical significance because it is in principle impossible to specify what we mean when we try to talk about that which no sense experience could confirm or disconfirm, either directly or indirectly. If a purified physics weeds out nonoperational concepts, a purified philosophy excludes all of metaphysics.

The verifiability criterion is part of logical positivism's theory of meaning. The main break is between theoretical or "cognitive" meaning and "cognitive" nonsense by which the logical positivists meant "lack of cognitive meaning." Theoretical nonsense is broken down into three subclasses: (1) pure gibberish, like that uttered by children pretending speech, (2) locutions violating syntax, for example, "Nobody was on the road, and he was walking faster than I was" violates syntax by treating "nobody" as a name, and (3) "emotive" expressions. These are said to be locutions that are generally recognized means of venting emotions, feelings, and attitudes without describing them. The positivists put metaphysical sentences under emotive meaning, together with poetry, normative ethics, and religious discourse. Carnap's "Ueberwindung der Metaphysik durch logische Analyse der Sprache"³ is a full-length essay stating the classic positivistic view of the emotive character of metaphysics.

The theoretically meaningful divides into the sentences governed by the verifiability criterion and the tautologies (and their denials). The tautologies are the only necessary truths admitted within the positivistic scheme. Following Wittgenstein, the positivists accounted for the necessity of tautologies in terms of formal structure devoid of content. For example, letting "*p*" and "*q*" stand for any statements and defining "*p* or *q*" to mean it is not the case that *p* and *q* are false simultaneously, the formula:

$$p \text{ or not-}p$$

is a formal truth. This fact can be proved by mechanical calculation. It is in this sense only that formal truths are known *a priori*. It follows from all this that there are no factual *a priori* propositions.

Against Husserl's factual *a priori*, Schlick argued that all Husserlian propositions, for example, that all colored surfaces are extended, are disguised tautologies. They are true in virtue of the rules governing the uses of the words "colored," "surface," "extended."⁴ Against Kant's factual *a priori* the positivists had two lines of attack. They believed that all of mathematics, including arithmetic and geometry, is at bottom a system of tautologies without any factual content whatever. This, they thought, refutes Kant's analysis of arithmetic

and geometry as factual *a priori*. The second line of attack, supplementing the first, was provided by Einstein's general theory of relativity. The geometry of the general theory is Riemannian, one of the innumerable possible non-Euclidean geometries. Taken as a hypothetico-deductive system without any physical interpretation of its fundamental concepts, geometry—be it Euclidean or not—is a tautological system, hence not factual. But when made a part of a physical theory and interpreted in physical terms, any geometry becomes a factual theory, but then its truth or falsehood is no longer known *a priori*. Einstein himself had said: "As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality."

Carnap's most original and exciting work during the formative years of logical positivism may be understood as an attempt to work out a conception of philosophy consistent with the tenets of logical positivism. Carnap set out to show how philosophy still has a task, granted that it is neither metaphysics, nor natural science, nor mathematical logic. The aim was to show that philosophy is reductive analysis in the style of logical atomism, but with two differences. The logical atomists had described analysis as supplying in a "clarified" language equivalents for statements in ordinary language whose meaning and truth were known on the common-sense level. The equivalents in the "clarified" language were thought to be superior in that they pictured the facts more adequately. Indeed, when reduced to their ultimate atomistic base, they were ideal pictures of facts. Carnap and the rest of the Vienna Circle saw that this way of describing and of justifying analysis is inconsistent with their positivism. Statements talking about the relation of language to fact were thought to be unverifiable. Moreover, as they were obviously not statements belonging to formal logic, they were not "cognitively" meaningful. As the positivists conceived it, philosophy was "cognitively" meaningful, but not empirical. These conditions would be satisfied if it could be shown that philosophical sentences are about the logical (syntactical) relations and properties of linguistic expressions. Philosophy was to be identical with logic (syntax), provided that "logic" was suitably broadened to cover the syntax of the language of the factual sciences in addition to the syntax of mathematics. In this way philosophy would be more than mathematical logic while still differing from factual science. Factual science would be the investigation of nature. Philosophy would be logical investigation of the language of factual science. And one could justify philosophy by its intrinsic intellectual interest; or by its power to produce clarity so that we would be safeguarded from the sorts of blind alleys that classical physics got into because it allowed nonoperational concepts of space and time; or by showing that philosophy explains how so many traditional disputes are merely verbal; or by showing how it prevents us from being misled into metaphysical pseudotheses which cannot be corrected as easily as the merely verbal disputes (for the distinction between metaphysical pseudotheses and merely verbal disputes see p. 450–452).

The consistent working out of this view of philosophy within the positivistic framework requires a demonstration that the language of science can describe its own syntax. The language of science, as construed by Carnap, is the theoretically adequate language, i.e., it is the language in which everything sayable can be said. Only nonsense is excluded from among its sentences. The

positivists assumed that the logical skeleton of the theoretically ideal language is the one depicted in *Principia Mathematica*. The logical skeleton, it was further assumed, was sufficient to account for the whole of pure mathematics, including pure geometry. But to get the full-fledged language of the empirical sciences, the *Principia* skeleton had to be filled out with some extralogical primitive terms and nontautological principles or rules, these being the syntactical correlates of what are ordinarily known as physical laws. Now philosophical sentences could not fall outside the theoretically ideal language on pain of making philosophy into cognitive nonsense. Philosophical sentences were not to constitute, in other words, a class of sentences distinct from the sentences of theoretical discourse. Wittgenstein, in the *Tractatus*, had said that the sentences of philosophy are nonsensical: "My propositions are elucidatory in this way, he who understands me finally recognizes them as senseless when he has climbed out through them, on them, over them." This doctrine followed from Wittgenstein's view that the propositions of philosophical analysis cannot describe their own logical form. Philosophy is, therefore, the attempt to express the inexpressible. Russell, in his introduction to the *Tractatus*, had suggested that even if a language could not describe its own structure, there might be a hierarchy of languages such that for every language there would be one at a higher level capable of describing the logical form of the language below it.

The trouble with Russell's suggestion, from Carnap's point of view, would be that it rules out the possibility of a theoretically ideal language, the existence of which seems to have been taken for granted by logical positivists, especially Carnap. For at every level in the hierarchy, the same defect would recur. The language would not be able to talk about its own logical form, hence it would not be able to talk about everything sayable. And the defect of Wittgenstein's position was that it made philosophy into nonsense.

In order to sustain his view that philosophy, conceived as being the description of the logical syntax of the language of the factual (empirical) sciences, is a theoretical discipline, Carnap had to show that Wittgenstein was wrong. He took Wittgenstein to be saying that the ideal language cannot talk about its own syntax without contradiction. So in *Logische Syntax der Sprache* (1934),⁵ he undertook to show that a language rich enough to contain elementary arithmetic can talk about its own logical form or syntax. It would be a corollary of this that the ideal theoretical language can consistently talk about its own syntax.

The form of language, Carnap said, is determined by two sorts of rules. One sort consists of formation rules, rules for forming the sentences of the language. The second sort consists of transformation rules, rules for deriving sentences from sentences. These two sorts of rules together exhaust syntax. Carnap showed that a language rich enough to contain mathematics and physics can talk about its own syntax without generating contradiction. Using a technique developed by Gödel in 1931, Carnap "arithmetized" syntax⁶ (for a popular exposition of arithmetization see James R. Newman and Ernest Nagel, *Gödel's Proof*, N.Y.U. Press, 1958, esp. pp. 68-84; shorter versions of this monograph are in *Scientific American*, June, 1956, and James R. Newman, *The World of Mathematics*, N.Y., 1956, Vol. 3, esp. pp. 1688-1691). The rules concerning the "range of possible language-forms and, consequently, of the various possible

logical systems" (*The Logical Syntax of Language*, p. xiv), belong to combinatorial analysis, a part of arithmetic. The rules concerning a specific language belong to applied mathematics. (Carnap suggests that the former are to the latter what pure geometry is to physical geometry.) Thus, logical analysis yields sentences belonging to pure or to applied mathematics, and hence it may be held that philosophy is theoretically significant without being identical with factual science or with mathematical logic. It is not identical with science, for example, physics, because physics is first order talk about nature. Philosophy is second order talk about the language of physics. Philosophy is also not identical with mathematical logic because the language of physics is richer than that of pure mathematics. (This is true if mathematical logic is identified with the axiomatization and formalization of classical mathematics in purely logical terms. An example is W. V. Quine's *Mathematical Logic*, 1st ed., Harvard, 1940.)

Carnap said that logical syntax (or philosophy) could be in one of two modes of speech. The traditional philosophers, including the Greeks, were given credit for having engaged in philosophical activity at least part of the time, even though they seemed to be talking metaphysics. For example, they would say "Five is a number," making it sound as if they were talking about something outside of language. They were simply talking in the "material mode of speech." Put in the "formal mode of speech," what they meant was that "'Five' is a numeral." This is clearly about language. Carnap was tolerant of the material mode. Only he warned against being misled by it into metaphysics. As long as the material mode was recognized for what it is, namely, an informal way of talking, but translatable into formal talk, there was no danger.

The distinction was part of Carnap's program of rounding out a consistent positivism. But the alleged equivalences were frequently howlers. For instance, Carnap translated the material mode sentence "The lecture treated of metaphysics" into the formal mode, "The lecture contained the word 'metaphysics.'" A biography of Queen Victoria might state that she was altogether ignorant of metaphysics. The word "metaphysics" is contained in such a biography, but it is false that the book treats of metaphysics. Even if some of Carnap's translations are satisfactory, he would be begging the question if he insisted that therefore his translations into the formal mode of traditional metaphysical statements in the material mode are correct and convey precisely what the metaphysician meant to say.

Besides using it as a reason to say that what positivism was doing was continuous with the philosophical tradition, Carnap used the material-formal distinction to escape the need of admitting that, at least at the level of protocols, language and reality are related and the relation has to be mentioned in philosophical statements. In "Physics as a Universal Language" (reprinted below), Carnap writes in the material mode: "The simplest statements in the *protocol-language* refer to the given, and describe directly given experience or phenomena, i.e., the simplest states of which knowledge can be had." Now this is talking about the relation of language and what lies outside language. But not really. For the same thing can be said in the formal mode: "The simplest statements in the *protocol-language* are protocol-statements, i.e., statements needing no justification and serving as foundation for all the remaining statements of science."

But *why* are these particular classes of protocols the ones serving as the foundation? The usual answer would be that they seem to be the ones we cannot do without if we are to have a language adequate to talk about what we experience. Consistent to the last, Carnap gives no such "metaphysical" answer. He says the basic protocols are chosen by convention. But this is hard to believe. In his *Philosophical Analysis*, J. O. Urmson has written a nice epitaph to this phase of logical positivism:

When Carnap says "Protocol statements are of the same kind as: 'joy now,' 'here, now, blue,' 'there, red,'" Carnap means, or ought to mean, that all protocol sentences are of the same syntactical type as "joy, now" and the rest. He does not mean, officially at any rate, statements which as directly report reality as does "joy, now," but statements to which the same rules for the formation of sentences and their transformation into others apply. Bearing this in mind, we ought immediately to ask two obvious questions: Why does Carnap choose sentences of this syntactical form rather than any others to fulfill this particular basic role in language? And on what principle does one decide which of these protocols of the right syntactical form to accept and which to reject? Carnap cannot give the obvious answers because statements of this syntactical form are the kind which we use to report experience; and we select those for acceptance which do as a matter of fact record experience accurately. For according to Carnap to say that a statement is of the kind which reports experience is just to say, in the material mode, that it is of this syntactical form.

The well-nigh incredible answers in fact given are these. It is purely a matter of convention that we select sentences of this syntactical form as the basic protocol statements; and we accept those protocols which are accepted by the accredited scientists and reject those which are not. Carnap says, for example, "Every concrete proposition belonging to the physicalist language-system can in suitable circumstances serve as a protocol proposition." We could go on now to ask why we accept the protocols of accredited scientists, why they are accredited, and how we know within syntax that these or those are accepted by accredited scientists. But it is clearly not worth while to pursue this theory further. Philosophy cannot just be logical syntax, nor can a language be characterized by a vocabulary understood as a list of marks on paper with formation and transformation rules. Carnap and his fellows probably did as well as can be done by this thesis. But it is impossible; they could only make it appear plausible by relying on the natural meaning of what was supposed to be merely syntax in the material mode of speech. Carnap, of course, came to see this. He now acknowledges, and writes on, a branch of philosophy which he calls semantics and which deals with this forbidden topic of the relation of words to things. But on the credit side of the Carnap of other days it must be said that he was one of the few in the period of classical logical empiricism who honestly faced the need to maintain consistently that philosophy consisted solely of tautological transformations, of analytical equivalences. But for his errors the need for some revision of the doctrine would not have been seen so quickly.⁷

By 1935, however, Carnap had modified his views on this point so that remarks like Urmson's are relevant only to a relatively short period in Carnap's philosophical development. In "Truth and Confirmation," reprinted below, he allows that a statement may be "compared with fact" if by this we understand the operation of "confronting" a statement with the facts confirming it. This

operation he restricts to what he calls "directly testable" statements, and these he roughly characterizes in terms of conceivable circumstances (observations) in which the statement in question would be considered so strongly confirmed or disconfirmed on the basis of one or very few observations that we would either accept or reject it outright. These statements are the counterparts of what earlier the Vienna Circle called "protocol statements."

The unity of science is another tenet characteristically associated with logical positivism. The thesis has two parts. One says that all the specific sciences, for example, physics, chemistry, biology, and psychology have a common vocabulary. In "The Physical Language as the Universal Language of Science," Carnap identifies the common language as the physical language. This is the language in which "statements of the simplest form . . . attach to a specific set of co-ordinates (three space one time co-ordinates) a definite value or range of values of a coefficient of physical state." This is not identical with the language of current physics. For physics may alter (for instance, quantum theory, which is now "probabilistic" may become "deterministic"), while the physical language still remains the one containing the basic scientific vocabulary. This at least is Carnap's claim in "The Physical Language as the Universal Language of Science," reprinted below. The second part of the unity of science program claims that all the laws of all the sciences are presumably derivable from physical laws. But this is only a presumptive hope. Its truth or falsehood, Carnap says, can be determined only by waiting to see how the sciences in fact develop.

To illustrate the thesis of physicalism and to argue that it is in principle a plausible position, Carnap proposes a way of translating a psychological statement, for example, "Jones is in pain," into a statement about the observable states of Jones's body, including the sounds Jones makes (see "Philosophy and Logical Syntax," III, 7 and 8, reprinted below). The notion of "translation" in question is a special one. The translating sentence need not be logically equivalent to the translated sentence. Carnap's physicalism does not require that "Jones is in pain" be logically equivalent to "Jones's body is in state S." It is sufficient that there be a scientific law to the effect that someone is in pain if, and only if, his body is in state S. Then, from someone's being in pain together with the law, we can deduce his being in state S; and from his being in state S together with the law, we can deduce his being in pain. It is in this sense that "Jones is in pain" and "Jones's body is in state S" are translations (analyses) of one another although they are not logically equivalent statements. Carnap invokes the verifiability criterion of cognitive meaning in arguing that such translation is in principle possible. For, if a psychological statement such as "Jones is in pain" were not directly or indirectly verifiable, it would have no cognitive meaning, hence could not be a sentence belonging to (scientific) psychology.

This theory, however, leads to a serious difficulty. The verifiability criterion implies that two synthetic sentences have the same cognitive meaning if, and only if, they are both true or both false under the same circumstances. If it were a law that a person is in pain if, and only if, his body is in a state S, then the psychological statement, "Jones is in pain," would be true or false under the same circumstances as the physical statement, "Jones's body is in state S." Hence the two sentences would have the same cognitive meaning. This would be sufficient for saying that they are translations of one another even though they

are not logically equivalent. However, the reader may wonder as to how we are to arrive at the needed scientific laws. On the usual view, an invariant correlation between matters of fact may be discovered by observing that (at least) two variables are functionally interdependent. For example, we observe that an object looks red in sunlight if, and only if, it emits such and such wave lengths. The possibility of discovering such a matter-of-fact correlation presupposes that we understand the color-word "red" and we understand it as not having the same meaning as the phrase "emits waves of such and such length." But in Carnap's view in "Philosophy and Logical Syntax," the cognitive meaning of "Jones is in pain" is that Jones's body is in state S. That is to say, "Jones is in pain" has no independent cognitive meaning. How, then, can we discover an invariant correlation between pain and the state S?

Since 1935, Carnap has broadened his earlier tendency to restrict philosophy to "syntax" to include semantical investigations. "Truth and Confirmation" is a harbinger of this new emphasis. In this new spirit, he published a classic monograph, "Testability and Meaning" (1936) in which he did some pioneer work in the analysis of dispositional predicates such as "soluble," "malleable," and so on. His most intensive work in recent years, however, is concerned with constructing a logic of probability and induction that he hopes will make explicit the fundamental presuppositions of scientific method and the foundations of statistics, a branch of mathematics. Carnap's theory of induction is the major alternative to Reichenbach's "frequency theory" of probability. If Carnap succeeds in carrying out his program, his contributions may bring about unsuspected innovations in scientific procedures together with a better understanding of their fundamental presuppositions.

G. N.

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3. Rudolf Carnap, "Überwindung der Metaphysik durch Logische Analyse der Sprache," *Erkenntnis*, 2 (1931) (English translation in A. J. Ayer, ed., *Logical Positivism*, New York, The Free Press of Glencoe, 1959).
4. See Schlick, "Is There a Factual *a Priori*?" Wilfrid Sellars (trans.), in H. Feigl and W. Sellars (eds.), *Readings in Philosophical Analysis*, New York, Appleton-Century-Crofts 1949 (first published in *Wissenschaftlicher Jahresbericht der Philosophischen Gesellschaft an der Universität zu Wien für das Vereinsjahr, 1930-1931*).

5. The English translation appeared as Rudolf Carnap, *The Logical Syntax of Language*, New York, Harcourt, Brace & World, Inc., 1937. Rudolf Carnap, *Philosophy and Logical Syntax*, London, George Routledge & Sons, 1934, reprinted here is a popular digest of some of the main themes of that book.

6. For a popular exposition of arithmetization see James R. Newman and Ernest Nagel, *Goedel's Proof*, New York, New York University Press, 1958, esp. pp. 68–84; shorter versions of this monograph are in *Scientific American*, 6 (June, 1956); and James R. Newman, *The World of Mathematics*, New York, Simon and Schuster, 1956, vol. 3, esp. pp. 1688–1691.

7. J. O. Urmson, *Philosophical Analysis*, Oxford, Oxford University Press, 1956, p. 125.

The Physical Language as the Universal Language of Science

by **RUDOLF CARNAP**

AUTHOR'S INTRODUCTION: THE VIENNESE CIRCLE DOES NOT PRACTICE PHILOSOPHY

The reader may find it easier to understand the main article if I preface it by some remarks on the general nature of the views held by the Viennese Circle to which I and my friends belong.

In the first place I want to emphasize that *we are not a philosophical school and that we put forward no philosophical theses whatsoever*. To this the following objection will be made: You reject all philosophical schools *hitherto*, because you fancy your opinions are quite new; but every school shares this illusion, and you are no exception. No, there is this essential difference must be the answer. Any new philosophical school, though it reject all previous opinions, is bound to answer the old (if perhaps better formulated) questions. But we give no answer to philosophical questions,

Reprinted with the kind permission of Professor Carnap, Professor Black, and C. K. Ogden's executors from *The Unity of Science* (Psyche Miniatures), London, 1934. This is a translation by Max Black of "Die physikalische Sprache als Universal-sprache der Wissenschaft," *Erkenntnis*, 2, 1932. The present version incorporates a number of terminological improvements and some corrections, all of them suggested by Professor Carnap.

and instead reject all *philosophical questions*, whether of metaphysics, ethics or epistemology. For our concern is with *logical analysis*. If that pursuit is still to be called Philosophy let it be so; but it involves excluding from consideration all the traditional problems of philosophy. Originally, philosophy included mathematics and also, until recently, the sciences of sociology and psychology. At the present time, these studies have been separated from sociology and psychology in order to constitute independent branches of science. Both general logic and the logic of science, i.e. the logical analysis of scientific terms and statements, must be separated from philosophy, in the same fashion, in order to be pursued according to an exact, non-philosophic, and scientific method. Logic is the last scientific ingredient of philosophy; its extraction leaves behind only a confusion of non-scientific, pseudo problems.

METAPHYSICIANS—whether they are supporters of monism, dualism or pluralism, or spiritualism, materialism or some other “-ism”—propound questions concerning the essence of the universe, of the real, of nature, of history, etc. We supply no new answers but reject the questions themselves as questions in appearance only.

Epistemology claims to be a *theory of knowledge*, to answer questions as to the validity of knowledge, the basis on which knowledge rests. Here again are to be found many answers from various “-isms”; naïve and critical realism, subjective, objective and transcendental idealism, solipsism, positivism, etc., have as many different answers. We supply no new answer but reject the questions themselves since they seem to have the same character as those of metaphysics. (The case is altered if the questions are formulated not as philosophical enquiries but as a psychological enquiry concerning the origin of knowledge; in the latter form the question is proper to science and can be investigated by the empirical methods of psychology; but such an answer has nothing to do with the philosophical theses of the -isms mentioned.) If “epistemology” is understood to denote unmetaphysical, purely logical analysis of knowledge, our work certainly falls under that classification.

Ethics raises the question of the basis of validity of moral standards (principles of value) and of the specification of valid norms. Answers are given by idealists, utilitarians, intuitionists, etc. Here again we reject the questions themselves in view of their metaphysical character. (The case is otherwise in psychological or sociological investigations of the actions and moral judgments of mankind; such a method is certainly both unobjectionable and scientific, but its results belong to the empirical sciences of psychology and sociology, not to philosophy. It is better to avoid the term “ethics” for such investigation in order to avoid confusion with normative or regulative ethics.)

As against the preceding subjects, our own field of investigation is that of *logic*. Here are to be found problems of *pure logic*, i.e. questions relating

to the construction of a combined logical and mathematical system with the help of symbolic logic. Further, the problems of *applied logic*, or the *logic of science*, i.e. the *logical analysis* of terms, statements, theories, proper to the various departments of science. Logical analysis of physics, for example, introduces the problems of causality, of induction, of probability, the problem of determinism (the latter as a question concerning the logical structure of the system of physical laws, in divorce from all metaphysical questions and from the ethical question of freedom of will). Logical analysis of biology, again, involves the problems of vitalism, to take one example (but here again in a form free from metaphysics, *viz.*, as a question of the logical relations between biological and physical terms or laws). In psychology, logical analysis involves, among others, the so-called problem of the "relation between body and mind" (here also a non-metaphysical question, concerned not with the essential nature of two realms of being but with the logical relations between the terms or laws of psychology and physics respectively). In all empirical sciences, finally, logical analysis involves the problem of verification (not as a question concerning the essence of truth, or the metaphysical basis of the validity of true statements, but as a question concerning the logical inferential relations between statements in general and so-called portocol or observation statements).

In this fashion we use logical analysis to investigate statements of the various kinds proper to the various departments of science. The statements of traditional philosophy can also be subjected to the same treatment. The result is to reveal the absence of that logical relation (of implication) to empirical statements and, in particular, to protocol statements, whose presence is a necessary condition for the verifiability of the statements in question and is therefore usually, and with justice, required in the findings of all scientific procedure. All statements belonging to metaphysics, regulative ethics, and (metaphysical) epistemology have this defect, are in fact unverifiable and, therefore, unscientific. In the Viennese Circle, we are accustomed to describe such statements as nonsense (after *Wittgenstein*). This terminology is to be understood as implying a logical, not say a psychological, distinction; its use is intended to assert only that the statements in question do not possess a certain logical characteristic common to all proper scientific statements; we do not however intend to assert the impossibility of associating any conceptions or images with these logically invalid statements. Conceptions can be associated with any arbitrarily compounded series of words; and metaphysical statements are richly evocative of associations and feelings both in authors and readers. It is precisely that circumstance which so hinders recognition of their non-scientific character.

In traditional philosophy, the various views which are put forward are often mixtures of metaphysical and logical components. Hence the findings of the logical analysis of science in our circle often exhibit some similarity to definite philosophic positions, especially when these are negative. Thus,

e.g. our position is related to that of *positivism* which, like ourselves, rejects metaphysics and requires that every scientific statement should be based on, and reducible to, statements of empirical observations. On this account many (and we ourselves at times) have given our position the name of positivism (or new positivism or logical positivism). The term may be employed, provided it is understood that we agree with positivism only in its logical components, but make no assertions as to whether the given is real and the physical world appearance, or *vice versa*; for logical analysis shows that such assertions belong to the class of unverifiable pseudo-statements. Our views are related, in similar fashion, to those of empiricism, since we follow that theory so far as to reject *a priori* judgments; logical analysis shows that every statement is either empirically verifiable (i.e. on the basis of protocol statements), analytic, or self contradictory. On this account, we have at times been classified, both by ourselves and by others, as empiricists.

The following article is an example of the application of logical analysis to investigating the logical relations between the statements of physics and those of science in general. If its arguments are correct, all statements in science can be translated into physical language. This thesis (termed "physicalism" by Neurath) is allied to that of *materialism*, which respectable philosophers (at least in Germany, whether in other countries also I do not know) usually regard with abhorrence. Here again it is necessary to understand that the agreement extends only as far as the logical components of materialism; the metaphysical components, concerned with the question of whether the essence of the world is material or spiritual, are completely excluded from our consideration. In the final section of the article it is shown that methodical materialism and methodical positivism are not incompatible; in the terminology which I have been using here, this is as much as to say: the logical components of positivism and materialism are mutually compatible. This same example shows how great is the need for caution in classifying the opinions of the Viennese Circle under any of the old -isms. Between our view and any such traditional view there cannot be identity—but at most agreement with the logical components. For *we pursue logical analysis, but no philosophy.*

R. C.

Prague, January 1934.

1. THE HETEROGENEITY OF SCIENCE

Science in its traditional form constitutes no unity, and is separated into philosophy and the technical sciences. The latter are classified again as formal sciences (logic and mathematics) and empirical sciences. It is usual

to sub-divide the last class further and to understand that it includes, in addition to the "natural" sciences, psychology and the *Geisteswissenschaften* (social sciences) generally.

The basis of these various divisions is not merely convenience; rather is the opinion generally accepted that the various sciences named are fundamentally distinct in respect of subject matter, sources of knowledge and technique. Opposed to this opinion is the thesis defended in this paper that science is a unity, that all empirical statements can be expressed in a single language, all states of affairs are one kind and are known by the same method.

Very little will be said here concerning the nature of philosophy and the formal sciences. The author's views on this point have already been sufficiently explained by others on several occasions. Detailed attention will however be given to the question of the unity of the empirical sciences.

It is to modern developments in logic and particularly in the logical analysis of language that we owe our present insight into the nature of logic, philosophy and mathematics. Analysis of language has ultimately shown that philosophy cannot be a distinct system of statements, equal or superior in rank to the empirical sciences. For the activity of philosophy consists rather in clarifying the notions and statements of science. In this way does cleavage of the field of knowledge into philosophy and empirical science disappear; all statements are statements of the one science. Scientific research may be concerned with the empirical *content* of theorems, by experiment, observation, by the classification and organization of empirical material; or again it may be concerned with establishing the *form* of scientific statements, either without regard for content (formal logic) or else with a view to establishing logical connections between certain specific concepts (theory of knowledge considered as applied logic).

Statements in logic and mathematics are tautologies, analytic propositions, certified on account of their form alone. They have no content, that is to say, assert nothing as to the occurrence of some state of affairs. If to the statement: "*The (thing) A is black*" we added "*or A is blue,*" the supplemented statement still conveys some information though less than at first. If, however, we replace the supplementary phrase previously chosen by "*or A is not black*" the compound statement no longer conveys any information at all. It is a tautology, i.e., is verified by *all* circumstances. From such a statement no knowledge of the properties of the thing *A* can be derived. Theorems in *logic* and *mathematics* have, nevertheless, in spite of tautologous character and lack of content, considerable importance for science by virtue of their use in transforming statements having content. For the present thesis it is important to emphasize the logic and mathematics are sciences having no proper subject matter analogous to the material of the empirical sciences. Postulation of "formal" or "ideal" objects to be set

against the "real" objects of empirical sciences is unnecessary in the theory here briefly sketched.

Statements having content, i.e. statements, as is usually said, expressing some state of affairs, belong to the field of *empirical sciences*. Our *chief question* is whether these statements, or to speak more conventionally, whether the states of affairs expressed by such statements are divided into several mutually irreducible kinds. The traditional answer is in the affirmative; and it has been usual to make the chief distinctions between the subject matters of natural science, history, the social sciences, etc. (*Geisteswissenschaften*), and psychology.

On the basis of observations and experiments, the *natural sciences* describe the spatio-temporal events in the system which we call "nature." From the individual accounts thus obtained arise general formulae, so-called "laws of nature" (the process of "induction"). These in turn make it possible to obtain new specific statements, e.g. predictions (the process of "deduction").

History and the social sciences also use the method of observing material events. The usual view maintains, however, that observation in such fields is merely a subordinate method, the proper method being "understanding," empathy (*Einfühlung*) projection of oneself into historical monuments and events in order to grasp their "essence." The further question arises, so it is maintained, in all sciences dealing with culture in the widest sense as well as in specifically normative disciplines such as ethics, of comprehending "values," of establishing "norms." The usual view therefore is that the subject matter of such branches of knowledge, the *Geisteswissenschaften* as Germans say, whether they are "significant forms" or systems of values, are of a nature fundamentally different from the subject matter of natural science and cannot be understood by the methods of natural science.

As to the nature of *psychology* widely divergent views are prevalent. Experiments are made, measurements often taken of factors capable of quantitative determination. Many psychologists therefore include their science among the natural sciences, but while doing so accentuate the difference between their respective subject matters. Psychology, they say, deals with the "mental," with the phenomena of consciousness, perhaps also of unconsciousness, while other natural sciences treat of the "physical." Other psychologists again lay the emphasis on the relation between their science and the moral sciences. In psychology also, they say, knowledge is gained by "understanding" and empathy. The difference consists in the fact that psychology does not deal with works of art and institutions, as ethics and sociology do, but with the regularities to be found in the phenomena of consciousness. These various conceptions yet agree in the answer they furnish to the questions which we wish to discuss. Psychology is a science with its own fundamentally distinct and isolated subject matter.

We shall not need to discuss in further detail at this point divergent

views of the relations between the various sciences. It is sufficient to remember that it is usual to speak of fundamentally distinct kinds of objects; it matters little for our purpose whether the distinction is made in the manner described above (e.g. "ideal" and "real" objects; physical, mental objects; "values") or in some other. All such accepted views are contrary to the *thesis of the unity of science*.

2. LANGUAGES

In formulating the thesis of the unity of science as the assertion that objects are of a single kind, that states of affairs are of a single kind, we are using the ordinary fashion of speech in terms of "objects" and "states of affairs." The correct formulation replaces "objects" by "words" and "states of affairs" by "statements," for a philosophical, i.e. a logical, investigation must be in analysis of language. Since the terminology of the analysis of language is unfamiliar we propose to use the more usual mode of speech (which we will call "*material*") side by side with the correct manner of speaking (which we will call the "*formal*"). The first speaks of "objects," "states of affairs," of the "sense," "content" or "meaning" of words, while the second refers only to linguistic forms.¹

In order to characterize a definite *language* it is necessary to give its vocabulary and syntax, i.e. the words which occur in it and the rules in accordance with which (1) sentences can be formed from those words and (2) such sentences can be transformed into other sentences, either of the same or of another language (the so-called rules of inference and rules for translation). But is it not also necessary in order to understand the "sense" of the sentences, to indicate the "meaning" of the words? No; the demand thereby made in the material mode is satisfied by specifying the formal rules which constitute its syntax. For the "meaning" of a word is given either by translation or by definition. A translation is a rule for transforming a word from one language to another, e.g. "*cheval*" = "horse"; a definition is a rule for mutual transformation of words in the same language. This is true both of so-called nominal definitions (e.g. "Elephant" = animal with such and such distinguishing characteristics) and also, a fact usually forgotten, for so-called ostensive definitions (e.g. "Elephant = animal of the same kind as the animal in this or that position in space-time); both definitions are translations of words.

1. A strictly formal theory of linguistic forms ("logical syntax") will be developed later. The "thesis of syntax" which has only been sketched above will there be explained in detail and justified. It asserts that all statements of philosophy which are not nonsense are syntactical statements, and therefore deal with linguistic forms. (So-called statements in metaphysics, on the other hand, can be only the subject matter of syntactical statements, e.g. of a statement which asserts their syntactical illegitimacy, i.e. which asserts that they are nonsense.)

At the expense of some accuracy we may also characterize a language in a manner other than in the formal mode above and, using the more "intuitive" material mode, say a language is such that its statements describe such and such (here would follow a list of the objects named in the language). The alternative formulation is permissible provided the writer and the reader are clear that the material mode is only a more vivid translation of the previous description in the formal mode. If this is forgotten the danger may arise of being diverted by the material mode of speech into considering pseudo-questions concerning the essence of reality of the objects mentioned in the definition of a language. Nearly all philosophers and even many positivists have taken the wrong turning and gone astray in this way.

As an example we may take the language of arithmetic. In the formal mode, this particular language might be characterized as follows:

Arithmetical statements or sentences are compounded of signs of such and such a kind put together in such and such a way; such and such (specified) rules of transformation apply to them.

Alternatively, using now the material mode, we could say:

Arithmetical theorems state certain properties of numbers and certain relations between numbers.

Though such a formulation is inexact it can be clearly understood and is permissible if carefully handled. One must not, however, be led by this formulation into considering pseudo-questions about what kind of objects these "numbers" are, whether they are "real" or "ideal," extramental or intra-mental, etc. If the formal mode is used, in which "numbers" are replaced by "numerical symbols," such pseudo-questions vanish.

In the rest of the paper we shall at all times help the reader by using both modes of expression and write the formal, and, strictly speaking, only correct, expression of our thought in a parallel column on the left of the more usual formulation.

Various "languages" can be distinguished in science. Let us for example consider the language of economics which can be characterized in somewhat the following fashion: i.e., by the fact

that its sentences can be constructed from expressions: "supply and demand," "wage," "price," etc. . . . put together in such and such a way.

that its propositions describe economic phenomena such as supply and demand, etc.

We will call a language a *universal* language

if every sentence can be translated into it,

if it can describe every state of affairs,

and if this is not the case, a "partial" language. The language of economics is a "partial" language since e.g.

a theorem in physics concerning the vectors of an electro-magnetic field cannot be translated into the language of economics.

the state of an electro-magnetic field in some region cannot be described in economic terms.

3. PROTOCOL LANGUAGE

Science is a system of statements based on direct experience, and controlled by experimental verification. Verification in science is not, however, of single statements but of the entire system or a sub-system of such statements. Verification is based upon "protocol statements," a term whose meaning will be made clearer in the course of further discussion. This term is understood to include statements belonging to the basic protocol or direct record of a scientist's (say a physicist's or psychologist's) experience. Implied in this notion is a simplification of actual scientific procedure as if all experiences, perceptions, and feelings, thoughts, etc., in everyday life as well as in the laboratory, were first recorded in writing as "protocol" to provide the raw material for a subsequent organization. A "primitive" protocol will be understood to exclude all statements obtained indirectly by induction or otherwise and postulates therefore a sharp (theoretical) distinction between the raw material of scientific investigation and its organization. In practice, the laboratory record of a physicist may have approximately the following form: "Apparatus set up as follows: . . . ; pointer readings of various instruments at various times: . . . ; sparking discharge takes place at 500 volts." Such a set of statements is not a primitive protocol in view of the occurrence of statements

deduced with the help of other statements from the protocol.

which describe states of affairs not directly observed.

A primitive protocol would perhaps run as follows: "Arrangement of experiment: at such and such positions are objects of such and such kinds (e.g. 'copper wire'; the statement should be restricted perhaps to 'a thin, long, brown body' leaving the characteristics denoted by 'copper' to be deduced from previous protocols in which the same body has occurred); here now pointer at 5, simultaneously spark and explosion, then smell of ozone there." Owing to the great clumsiness of primitive protocols it is necessary in practice to include terms of derivative application in the protocol itself. This is true of the physicist's protocol and true in far greater measure of the protocols made by biologists, psychologists and anthropologists. In spite of this fact, questions of the justification of any scientific statement, i.e. of its origin in protocol statements, involve reference back to the primitive protocol.

From now onwards "protocol statements" will be used as an abbrevia-

tion for "statements belonging to the primitive protocol"; the language to which such statements belong will be called the "*protocol language*." (Sometimes also termed "language of direct experience" or "phenomenal language"; the neutral term "primary language" is less objectionable.) In the present state of research it is not possible to characterize this language with greater precision, i.e. to specify its vocabulary, syntactical forms and rules. This is, however, unnecessary for the subsequent arguments of this paper. The analysis which follows is a sketch of some of the views as to the form of protocol statements held at the present day by various schools of thought. Though the author will take no sides in the issues involved the incidental discussion will elucidate still further the meaning of the term "protocol language."

The simplest statements in the *protocol language* are protocol statements, i.e. statements needing no justification and serving as foundation for all the remaining statements of science.

The simplest statements in the *protocol language* refer to the given, and describe directly given experience or phenomena, i.e. the simplest states of which knowledge can be had.

QUESTION: What kinds of words occur in protocol statements?

FIRST ANSWER: Protocol statements are of the same kind as: "joy now," "here, now, blue; there, red."

SECOND ANSWER: Words like "blue" do not occur in protocol statements but appear first of all in derived propositions (they are words of higher type). Protocol statements on the other hand are of forms similar to the following:

(a) "Red circle, now"

or

(b)

or

(c)

THIRD ANSWER: Protocol statements have approximately the same kind of form as "A red cube is on the table."

QUESTION: What objects are the elements of given direct experience?

FIRST ANSWER: The elements that are directly given are the simplest sensations and feelings.

SECOND ANSWER: Individual sensations are not given directly but are the result of isolation. Actually given are more complex objects such as:

(a) Partial *gestalts* of single sensory fields, e.g. a visual gestalt,

or

(b) Entire sensory fields, e.g. the visual fields as a unity.

or

(c) The total experience during an instant as a unity still undivided into separate sense-regions.

THIRD ANSWER: Material things are elements of the given: a three-dimensional body is perceived as such directly and not as a series of successive two-dimensional projections.

These are three examples of contemporary opinions which are, of course, usually expressed in the material code. The first can be termed "Atomistic

Positivism" and is approximately Mach's standpoint. Most present-day critics regard it as inadequate, for objections brought against it by subsequent psychologists and especially followers of Gestalt psychology are to a great extent justified. Opinion on the whole tends to choose between the variations included in the second of the answers given above. The third view in our classification is not often held today; it is however more plausible than it appears and deserves more detailed investigation, for which this is however not the place.

Statements of the system constituted by science (statements in the language of that system) are not, in the proper sense of the word, derived from protocol statements. Their relation to these is more complicated. In considering scientific statements, e.g. in physics, it is necessary to distinguish in the first place between "singular" statements (referring to events at a definite place and time, e.g. "the temperature was so much at such and such a place and time") and the so-called "laws of nature," i.e. general statements from which singular statements or combinations of such can be derived (e.g. "the density of iron is 7.4 [always and everywhere]"). In relation to singular statements a "law" has the character of an *hypothesis*; i.e. cannot be directly deduced from any finite set of singular statements but is, in favourable cases, increasingly supported by such statements. A singular statement (expressed in the vocabulary of the scientific system) has again the character of an hypothesis in relation to other singular statements and in general the same character in its relation to protocol statements. From no collection of protocol statements, however many, can it be deduced, but is in the most favourable case continually supported by them. In fact deduction is possible but in the converse direction. For protocol statements can be deduced by applying the rules of inference to sufficiently extensive sets of singular statements (in the language of the scientific system) taken in conjunction with laws of nature. Now the verification of singular statements consists of performing such deductions in order to discover whether the protocol statements so obtained do actually occur in the protocol. Scientific statements are not, in the strict sense, "verified" by this process. In establishing the scientific system there is therefore an element of convention, i.e. the form of the system is never completely settled by experience and is always partially determined by conventions.

We will now consider the case of a person A undertaking, with the help of his protocol, verifications of scientific statements in the manner described above. The question whether each person has his own protocol language will be discussed later. For the present A 's own protocol language will be referred to as "the" protocol language.

Whenever the rules of transformation state the conditions under which statements in the protocol language can be deduced from a statement p ,

If a state of affairs described by p can be reduced to facts about given, i.e. direct, experience of A , A has in theory the possibility of verifying p .

it is always possible, in principle, for A to verify p . Whether A can actually do this depends on empirical circumstances. If, however, there is no such inferential relationship between a statement p and statements of the protocol language then p is not verifiable for A ; p has no sense, is formally incorrect.

In such a case A cannot understand the statement p , for to "understand" means to know the consequences of p , i.e. to know the statements of the protocol language which can be deduced from p .

If an inferential relation of the kind described holds between a statement p and each of the protocol languages of several persons p has sense for each such person. In such a case p will be said to have sense (for those persons) *inter-subjectively*. This term of course is relative to the persons who understand the statement in the manner described. By a language "inter-subjective" (for certain persons) will be understood a language whose statements are inter-subjective (for those persons). A statement p , which is inter-subjective (for certain persons) is said to be inter-subjectively valid if p is valid for each person, i.e. if it is supported, in sufficient measure, by the protocol statements of each such person.

It will be proved in the following sections that the physical language is inter-subjective and can serve as a *universal* language, i.e. as a language in terms of which all states of affairs could be expressed. Finally, an attempt will be made to show that the various protocol languages also can be regarded as partial languages, in the sense defined above, of the physical language.

4. THE PHYSICAL LANGUAGE AS AN INTERSUBJECTIVE LANGUAGE

The physical language is characterized by the fact that statements of the simplest form (e.g. the temperature of such and such a place at a specified time is so much),

attach to a specific set of co-ordinates (three space, one time co-ordinates) a definite value or range of values of a coefficient of physical state.

A then knows the "sense" of p , or what is expressed by p , consists of the method of verification, e.g. in the reduction to the given. If some statement p is not in this inferential relation to statements concerning the given, p cannot be understood by A , i.e. p is nonsense.

For if A is to understand a statement he must know what states of affairs involving the given (what possible direct experiences) are the case if p is true.

If the state of affairs expressed by a statement p is verifiable in the manner described by several persons.

express a quantitatively determined property of a definite position at a definite time.

Quantitative statements can also be replaced by *qualitative* ones as is usual in science as well as in everyday life, for reasons of brevity and ease of understanding. Qualitative statements can therefore be included in the physical language provided

rules are set up for translating all such statements into quantitative statements so that e.g. the statement "It is rather cool here" might be translated into the statement "The temperature here is between 5 and 10 degrees centigrade."

they can be understood as determinations of physical states of affairs or occurrences so that e.g. "It is rather cool here" and "The temperature here is between 5 and 10 degrees centigrade" are taken as statements of identical sense.

This characterization of the physical language corresponds to the traditional form of physics (for the sake of simplicity we are neglecting the coefficients of probability which occur in the physical statements). We wish however to interpret the term "the physical language" so widely as to include not the special linguistic forms of the present merely but also such linguistic forms as physics may use in any future stage of development. It may be that physical position will eventually be determined by more or less than four co-ordinates; perhaps it will not be possible to regard the co-ordinates simply as temporal and spatial magnitudes. Such modifications are of no importance for present purposes. The physical language will certainly continue to be so constituted

that every protocol statement composed entirely of words which can be (quite crudely) described as sensation-, perception-, or thing-words, can be translated into it.

that every fact of perception in everyday life, e.g. everything that can be learnt about light or material bodies (in the naive interpretation) can be expressed in the physical language.

This property of physical language is sufficient for our further discussion. It is unnecessary to specify further the exact form of physical languages which may possibly arise in the course of the future evolution of physics. In order to facilitate direct understanding in the spatio-temporal linguistic forms will always be used in the following sections. On the basis of the property of the physical language just mentioned, our thesis now makes the extended assertion that the physical language is a universal language, i.e. that every

statement can
be translated into it.

every state of affairs can be expressed
in it.

In addition to the simplest form of statements previously described, namely of *singular statements*, there are now various compound statement forms to be considered. The most important is the *universal implicative* statement expressing a universal implication: if at some point *P* in space-

time there is a state, a (i.e. a is the value of a certain magnitude at a certain place and time denoted by " P ") then there will be some other point P^1 , standing in such and such a spatio-temporal relation to P , at which (P^1) there will be with such and such probability a determination $a^1 = f(a)$ functionally dependent on a . This is the general form of a *natural law* in its widest meaning. P and P^1 often coincide. An example involving qualitative terms: "Blood is red"; a : distinguishing characteristic of blood assumed not to include its colour; $P = P^1$; a^1 : the colour red. An example involving quantitative terms: the second of Maxwell's equations:

$$\text{'Curl } E = \frac{-\mu}{c} \frac{\partial H}{\partial t}$$

a : the function of the spatial distribution of the electrical field in the neighbourhood of P which is denoted by "curl E "; $P^1 = P$; a : the rate of change of the magnetic field at P , denoted by $\frac{\partial H}{\partial t}$. The possibility of applying science, i.e. of making predictions concerning subsequent occurrences, depends upon the formulation of laws of nature.

The concepts of physics are quantitative concepts, having numerical values. This is a fact of decisive importance in permitting prediction on the basis of exact natural laws. Another peculiarity of physical concepts, which is of importance for the present discussion consists in their abstractness and the absence of qualities from their enunciation. This is to be interpreted as follows: The rules of translation from the physical language into protocol language are of such a kind that no word in the physical language is ever correlated in the protocol language with words referring only to a single sense field (e.g. never correlated with determinations of colour only or sound only). It follows that a physical statement permits the inference of protocol statements in every sensory field. Physical statements are "inter-sensory" in a sense which will be immediately explained. Moreover, they are also "inter-subjective," in agreement with the experiences of the various subjects; this will be discussed later.

The expression: "A note of such and such pitch, timbre and intensity," in the protocol language or in the language of qualities (which we need not at present distinguish) corresponds to the following expression in the physical language: "Material oscillations of such (specified) basic frequency with superimposed additional frequencies and such (specified) amplitudes."

a physical statement containing these expressions is correlated not only with statements containing the corresponding expression in the auditory field but also under certain conditions with statements containing expressions from other sensory fields.

the presence of such oscillations can be determined not only by auditory sensations (the sound of such a note) but also, with the help of suitable instruments, in the form of visual and tactile sensations.

There are no coefficients of physical state exclusively correlated with qualitative terms in a single specific sensory field. This is a fact of fundamental importance. For any qualitative term in some sensory field, we can determine with the help of qualitative terms from other sensory fields, the class of the correlated physical terms. As shown by the illustration used above, qualitative terms about the auditory field can be translated into physical statements of a particularly simple form. The process is more complicated when colours are involved, e.g. "green of such and such a kind" (specified by a number, from Ostwald's colour atlas say). Correlated in such a case is not a single physical state but a set of physical states. Every state of this class consists of a definite combination of frequencies of electromagnetic oscillations (e.g. for a definite "green" this class includes a combination of a wave-frequency of high intensity from the green part of the spectrum and a "red" frequency of feebler intensity as well as a combination of blue and yellow frequencies of medium intensities, etc.).

It is an important fact that the composition of the set of physical terms correlated with a qualitative term can be established experimentally by using in other sensory fields. Thus, e.g. the composition of the set of combinations of frequencies referred to above can be established only in virtue of the fact that the frequencies in question can be recognized by signs other than their respective colours, e.g. by the position of the corresponding line in the spectroscopic image. The colours of the spectrum are redundant in the implied experiment since a photograph will furnish all the information required. Hence a person completely blind to colours could still establish frequencies occurring at a definite position in space-time. So far, we have remained inside the region of visual sense, but it is possible to extend this reasoning to other senses. It would be possible for example to build into the spectroscope an electrical apparatus for exploring the spectrum, so constructed that a radiation of sufficient intensity set into motion a pointer which could be felt or a speaker which could be heard. By such means a person completely blind would still be capable of determining the frequency of an electromagnetic oscillation.

From these arguments follows the theoretical possibility of establishing results of the following three kinds:

¶ 1. Personal Determinations

A can discover:

which physical term (or class of physical terms) corresponds to a definite qualitative term in his protocol language (e.g. "green of such and such a kind").

under which physical conditions he experiences a definite quality (e.g. a definite *green*).

That determinations of this kind are theoretically always possible due to the fortunate circumstance (an empirical fact, not at all necessary in the logical sense) that

the protocol

the content of experience

has certain ordinal properties. This emerges in the fact of the successful construction of the physical language in such a fashion that qualitative determinations in protocol language are uniquely determined by the numerical distribution of coefficients of physical states.

On applying this to our example it follows that the scales of the tactile, auditory and photo-spectroscopes can be calibrated in such a fashion that these instruments give the same reading for every given case. In short the same physical terms correspond to the qualitative terms of every sensory field; we shall use the abbreviation: *physical determinations are valid inter-sensorily*.

¶ 2. Determinations by Other Persons

An experimenter *E* (e.g. a psychologist) can discover by using another person *S* (subject of an experiment):

which physical term (or set of physical terms) corresponds to a definite qualitative term in *S*'s protocol language (e.g. "green of such and such a colour").

what are the physical conditions in which *S* experiences a definite quality (e.g. a definite green).

The procedure used is the following: *E* varies the physical conditions (e.g. the combinations of various frequencies of oscillations) and discovers the conditions to which *S* reacts with the protocol statement containing the qualitative term in question. The possibility of such a discovery is independent of

whether the corresponding qualitative terms (names of shades of colours, etc.) occur in *E*'s protocol language.

whether *E* can also sense the corresponding qualities.

or of the possibility that *E* is colour blind or completely blind. For in this case, as in the case of his own experience, *E*, as previously stated, receives the same result whether he uses the tactile, auditory or photo-spectroscope. The discovery of the set of these physical terms corresponding to a definite qualitative term will be called the "physicalizing" or physical transformation of this qualitative term.

The result of our discussion can now be formulated as follows: A person can physicalize the qualitative terms both of himself and of another person.

¶ 3. *Determinations on Other Persons Made by Several Experimenters*

If the experiments on a single subject, S , as described in the preceding subsection, are performed not by a single experimenter E_1 but by several experimenters E_1, E_2, \dots the various results obtained are in mutual agreement. This is due to the following fact.

The determined value of a physical magnitude in any concrete case is independent not only of the particular sensory field used but also of the choice of the experimenter. In this we have again a fortunate but contingent fact, viz., the existence of certain structural correspondences between

the protocols

series of experiences

of the various experimenters. A difference of opinion between two observers concerning the length of a rod, the temperature of a body, or the frequency of an oscillation, is never regarded in physics as a subjective and therefore unresolvable disagreement; on the contrary, attempts will always be made to produce agreement on the basis of a common experiment. Physicists believe that agreement can in principle be reached to any degree of exactitude attainable by single investigators; and that when such agreement is not found in practice, technical difficulties (imperfection of instruments, lack of time, etc.) are the cause. In all cases hitherto where the matter has been investigated with sufficient thoroughness this opinion has been confirmed. *Physical terms are valid intersubjectively:*

Under headings (1) and (3) above we have spoken of a "fortunate accident"; the state of affairs mentioned under (2) is however a necessary consequence of the others. It may be noticed however that these facts, though of empirical nature, are of far wider range than single empirical facts or even specific natural laws. We are concerned here with a perfectly general structural property of experience which is the basis of the possibility of intersensory Physics (fact [1]), and intersubjective Physics (fact [2]), respectively.

The question now arises whether another language exists which is intersubjective and can therefore be considered as a language for science. The reader's thoughts may turn perhaps to the language of qualities, used say as a protocol language. In virtue of the previously mentioned fact of the possibility of giving a physical interpretation to the language of qualities, the latter must be a sub-language of the physical language. Ac-

according to customary philosophical opinion, however, there can (or even must) be another non-physical interpretation. It will be shown later that there are objections to such a non-physical interpretation, and that, in any case, the language of qualities, when so interpreted, is not intersubjective.

It will also be demonstrated that all other languages used in science (e.g. biology, psychology or the social sciences) can be reduced to the physical language. *Apart from the physical language* (and its sub-languages) *no intersubjective language is known*. The impossibility of an intersubjective language not included in the physical language has certainly not yet been proved; there are however not the slightest indications to suggest that such a language exists. Further, not a single statement, of any kind, is known which, established intersubjectively, is incapable of translation into the physical language.

It is just demand that science should have not merely subjective interpretation but sense and validity for all subjects who participate in it. Science is the system of *intersubjectively valid statements*. If our contention that the physical language is alone in being intersubjective is correct, it follows that *the physical language is the language of science*.

5. THE PHYSICAL LANGUAGE AS A UNIVERSAL LANGUAGE

In order to be a language for the whole of science, the physical language needs to be not only intersubjective but also universal. It follows, therefore, to consider whether this is the case, i.e., whether the physical language has the property that

every statement (whether true or false) can be translated into it.

every possible state of affairs (every conceivable state, whether actually occurring or not) can be expressed by it.

We will begin by considering the subject matter of the *inorganic sciences*, of chemistry, geology, astronomy, etc. In these regions doubt can hardly arise as to the applicability of physical language. The terminology employed is often different from that of physics but it is clear that every term occurring can be reduced to physical terms. For the definition of such terms is always in terms based either on physical terms or else on qualitative terms (e.g. results of observations); even in the latter case no objections will be raised to the physical interpretation of qualitative observations in these sciences.

The first serious doubts will arise in connection with *Biology*. For the issue of vitalism is still violently controversial at the present time. If we extract the kernel of sense and reject the metaphysical pseudo-questions

which are usually confused in the controversy, the essence of the matter in dispute can be stated as the question whether the natural laws which suffice to explain all inorganic phenomena can also be a sufficient explanation in the region of the organic. A negative answer to this question, such as supplied by vitalists, necessitates the formulation of specific and irreducible biological laws. The Viennese Circle is of the opinion that biological research in its present form is not adequate to answer the question. We therefore expect the decision to be made in the course of the future development of empirical research. (Meanwhile our presumption tends more to an affirmative answer.) It is however important to notice that the question of the universality of the physical language is quite independent of the vitalist-mechanist controversy. For the former is a question of reducing not biological *laws* to physical laws but biological *concepts* (i.e. terms, words) to physical concepts. And the fact of the latter reducibility can, in contrast to that of the former, be easily demonstrated. This will perhaps appear obvious immediately the confusion of the two issues is eliminated. Biological terms involve such notions as species, organisms and organs, events in entire organisms or in parts of such organisms, etc. (notions such as "will," "image," "sensation," etc. can be referred to psychology and omitted from consideration here). Such notions are always defined in science by means of certain perceptible criteria, i.e. qualitative terms capable of being physicalized; e.g. "fertilization" is defined as the fusion of spermatozoon and egg; "spermatozoon" and "egg" are defined as cells of specified spatial redistribution of parts, etc. It is possible to define with the help of similar physical terms the meanings of "metabolism," "cell-division," "growth," "development," "regeneration," etc. The same is true in general of all biological terms, whose definitions always supply empirical and perceptible criteria.

(This is not the case however, for such words as "entelechy," but terms of this sort belong to a vitalistic philosophy of nature rather than to biology and can occur only in "nonsensical" statements. It can be shown that these terms represent pseudo-concepts incapable of formally correct definition.²)

The preceding arguments show that every statement in biology can be translated into physical language. This is true, in the first instance, of singular statements concerning isolated events; the corresponding result for biological laws follows immediately. For a natural law is no more than a general formula used for deriving singular statements from other singular statements. Hence no natural law in any field can contain terms absent from the singular statements in the same field. The question set by vitalism of the relation of biological laws (which laws the foregoing shows to be translatable in all circumstances into physical language and therefore to

2. Cf. R. Carnap, "Ueberwindung der Metaphysik durch logische Analyse der Sprache," *Erkenntnis*, 2, 219. English translation in A. J. Ayer (ed.), *Logical Positivism*, New York: The Free Press of Glencoe, 1959.

belong to the general type of physical law) to the physical laws valid in the inorganic realm, does not even arise for consideration here.

The application of our principles to *psychology* usually provokes violent opposition. In this department of science, our thesis takes the form of the assertion that all psychological statements

can be translated into physical language. This applies both to singular statements and to general statements ("psychological laws"). In other words, the definition of any psychological term reduces it to physical terms.

refer to physical events (viz. physical events in the body, especially the central nervous system, of the person in question) whether to definite single events or in general of events of specified type in a specified person or, more generally still, to such events in any person. In other words, every psychologic concept refers to definite physical properties of such physical events.

The problems raised by these statements are to be dealt with in another paper and will therefore not be discussed further in this place.³

If the assertion of the possibility of translating psychological statements into physical language is well grounded, the truth of the corresponding assertion concerning the statements of (empirical) *Sociology* easily follows. Sociology is understood here in its widest sense to include all historical, cultural and economic phenomena; but only the truly scientific and logically unobjectionable statements of these sciences belong to this classification. The sciences mentioned often in their present form contain pseudo concepts, viz., such as have no correct definition, and whose employment is based on no empirical criteria;

such words stand in no inferential relation to the protocol language and are therefore formally incorrect.

such (pseudo-) concepts cannot be reduced to the given, are therefore void of sense.

Examples: "objective spirit," "the meaning of history," etc. By (empirical) sociology is intended the aggregate of the sciences in these regions in a form free from such metaphysical contaminations. It is clear that sociology in this form deals only with situations, events, behaviour of individuals or groups (human beings or other animals), action and reaction on environmental events, etc.

These statements may contain physical and also psychological terms. If the foregoing thesis, of the possibility of converting psychological terms

These events may be in part physical (so-called) and in part mental (so-called). If the foregoing thesis, of the possibility of reducing psychological

3. Carnap, "Psychologie in physikalischer Sprache," *Erkenntnis*, 3 (1933), 107-142. English trans. in A. J. Ayer, *op. cit.*

into physical terms, is valid, then the same must be true of all sociological terms and statements.

notions and statements to physical terms is valid, sociological events must be entirely physical.

These principles were first enunciated in fundamental outline by Neurath,⁴ who has also discussed in detail their bearing on the problems and methods of sociology; and his papers will be found to include many examples of the possibility of formulation in physical terms and of the elimination of pseudo concepts. We shall therefore be able to omit any further discussion on this point.

The various departments of science have now been inspected. The standpoint of traditional philosophy would demand the inclusion of *Metaphysics*. But logical analysis arrives at the result (cf. fn. p. 411) that so-called metaphysical statements are no more than pseudo statements,

since they stand in no inferential relation either positive or negative to protocol statements. They either contain words irreducible to protocol words or are compounded of reducible words in a manner contrary to the laws of syntax.

since they describe no state of affairs either existent or non-existent. This is due to the fact that they either contain (pseudo-) concepts which cannot be reduced to the given and therefore denote nothing, or are compounded of sensible concepts in non-sensical fashion.

Our investigations of the various departments of science therefore lead to the conclusion

that every scientific statement can be translated into physical language.

that every fact contained in the subject matter of science can be described in physical language.

We must investigate whether statements in protocol language can also be converted into physical language.

4. Neurath, "Soziologie im Physicalismus," *Erkenntnis*, 2, cf. also his "Physicalismus," *Scientia*, Nov. 1931, "Empirische Soziologie. Der wissenschaftliche Gehalt der Geschichte und Nationalökonomie," *Schriften z. wiss. Weltauff.*, Vol. V, Vienna, 1931. Neurath was also the first both in the discussions of the Viennese Circle and, later, in the first article mentioned, to demand constantly the rejection of formulations in terms of "mental experience" rejected the comparison between statements and "reality," insisting that the correct mode was in terms only of statements and stated the thesis of physicalism in its most radical form. I am indebted to him for many valuable suggestions. By distinguishing between the "formal" and "material" modes, rejecting the pseudo-questions which use of the latter provokes, proving the universality of physical language, and in the consistent application of the formal mode to the construction of syntax (only sketched in the present article) I have arrived at results which wholly confirm Neurath's views. Moreover, the demonstration (section 6), in the present article, that the protocol language can be included in physical language, disposes of our previous difference of opinion on this point (the question of "phenomenal language") which is mentioned in Neurath's article. Neurath's suggestions, which have often met with opposition, have thus shown themselves fruitful in all respects.

6. PROTOCOL LANGUAGE AS A PART OF PHYSICAL LANGUAGE

To what extent do statements in protocol language conform to our thesis of the universality of the physical language? That thesis demands that

statements in protocol language, e.g. statements of the basic protocol, can be translated into physical language.

given, direct experiences are physical facts, i.e. spatio-temporal events.

Objections will certainly be raised to these assertions. It will be said

“Rain may be a physical event but not my present memory of rain. My perception of water which is falling at this moment and my present joy are not physical events.”

This objection is in the spirit of usual views on this question, and would be accepted by most writers on the Theory of Knowledge. If this objection is considered more closely it will be remarked, in the first place, that it is directed only against the material formulation of our thesis (in the right-hand column). We have previously seen that the material mode is a mere transformation of the correct formal mode of speech and easily leads to pseudo-problems. We shall therefore, regard this objection critically in view of the fact that it can be formulated only in the terminology of the right-hand column, i.e. in the material form, but for the moment, however, we will leave such criticisms on one side and adopt the (fictitious) procedure of regarding the matter from the standpoint of our opponent: we shall, in the first place, use the material mode quite freely and, secondly, suppose that the objection and the grounds on which it is based in its material formulation are justified. It will then appear that we are led into insoluble difficulties and contradictions. This fact will disprove the supposition and dispose of the objection.

Let P be a singular statement in the protocol language of a person S_1 , i.e. a statement about the content of one of S_1 's experiences, e.g. “I (i.e. S_1) am thirsty” or, briefly, “Thirst now.” Can the same statement of affairs be expressed also in the protocol language of another person S_2 ? The statements of the latter language speak of the content of S_2 's experiences. An experience in the sense in which we are now using the word is always the experience of a definite person and cannot at the same time be the experience of another person. Even if S_1 and S_2 were, by chance, thirsty simultaneously the two protocol statements “Thirst now” though composed of the same sounds would have different senses when uttered by S_1 and S_2 re-

spectively. For they refer to different situations, one to the thirst of S_1 , the other to the thirst of S_2 . No statement in S_2 's protocol language can express the thirst of S_1 . For all such statements express only what is immediately given to S_2 ; and S_1 's thirst is a *datum* for S_1 only and not for S_2 . We do say of course that S_2 can "recognize" the thirst of S_1 and can therefore also refer to it. What S_2 is actually recognizing however is, strictly speaking, only the physical state of S_1 's body which is connected for S_2 with the idea of his own thirst. All that S_2 can verify when he asserts " S_1 is thirsty" is that S_1 's body is in such and such a state, and a statement asserts no more than can be verified. If by "the thirst of S_1 " we understand not the physical state of his body but his sensations of thirst, i.e. something non-material, then S_1 's thirst is fundamentally beyond the reach of S_2 's recognition.

A statement about S_1 's thirst would then be fundamentally unverifiable by S_2 , it would be for him in principle impossible to understand, void of sense.

In general, every statement in any person's protocol language would have sense for that person alone, would be fundamentally outside the understanding of other persons, without sense for them. Hence every person would have his own protocol language. Even when the same words and sentences occur in various protocol languages, their sense would be different, they could not even be compared. *Every protocol language could therefore be applied only solipsistically; there would be no intersubjective protocol language. This is the consequence obtained by consistent adherence to the usual view and terminology* (rejected by the author).

But even stranger results are obtained by using, on the basis of our supposition, the material terminology which we regard as dangerous. We have just considered the experiences of various persons and were forced to admit that they belong to completely separated and mutually disconnected realms. We will now consider the relations between the content of my own experiences say, as described by statements in my protocol, and the corresponding physical situation as described by singular statements in physical language, e.g. "Here the temperature is 20 degrees centigrade now." We have on the one side the content of experience, sensations, perceptions, feelings, etc., and on the other side constellations of electrons, protons, electro-magnetic fields, etc.; that is, two completely disconnected realms in this case also. Nevertheless an inferential connection between the protocol statements and the singular physical statements must exist for if, from the physical statements, nothing can be deduced as to the truth or falsity of the protocol statements there would be no connection between scientific knowledge and experience. Physical statements would float in a void disconnected, in principle, from all experience. If, however, an inferential connection between physical language and protocol language does exist there must also be a connection between the two kinds of facts. For one statement can be

deduced from another if, and only if, the fact described by the first is contained in the fact described by the second. Our fictitious supposition that the protocol language and the physical language speak of completely different facts cannot therefore be reconciled with the fact that the physical descriptions can be verified empirically.

In order to save the empirical basis of the physical descriptions the hypothesis might perhaps be adopted that although protocol language does not refer to physical events the converse is true and physical language refers to the content of experiences and definite complexes abstracted from such content. Difficulties then arise however on considering the relation between the several persons' protocol languages and physical language. S_1 's protocol language refers to the content of S_1 's experience, S_2 's protocol language to the content of S_2 's experience. What can the intersubjective physical language refer to? It must refer to the content of the experiences of both S_1 and S_2 . This is however impossible for the realms of experience of two persons do not overlap. There is no solution free from contradictions in this direction.

We see that the use of the material mode leads us to questions whose discussion ends in contradiction and insoluble difficulties. The contradictions however disappear immediately we restrict ourselves to the correct, formal mode of speech. The questions of the kinds of facts and objects referred to by the various languages are revealed as pseudo-questions. These led us, in turn, to further unanswerable pseudo-questions such as the question how the reciprocal convertibility of physical language and protocol language is compatible with the "fact" that the first refers to physical situations and the second to experienced content. *These pseudo-questions are automatically eliminated by using the formal mode.* If, instead of speaking of the "content of experience," "sensations of color" and the like, we refer to "protocol statements" or "protocol statements involving names of colors" no contradiction arises in connection with the inferential relation between protocol language and physical language. Should then, those expressions in the material mode not be used at all? Their use is in itself no mistake, nor are they senseless, but we see that the danger involved is even greater than previously stated. For complete safety it would be better to avoid the use of the material mode entirely, although it is the terminology usual throughout the whole of philosophy (also in the Viennese Circle). If this mode is still to be used particular care must be taken that the statements expressed are such as might also be expressed in the formal mode. That is the criterion which distinguishes statements from pseudo-statements in philosophy. [Although the danger that pseudo-questions may arise in using the material mode is always present, the contradictions can be avoided by using the material terminology *monistically*, i.e. by speaking exclusively of the content of experience (in the spirit of solipsism) or else exclusively of physical states (in the spirit of materialism). If, however, a dualist attitude

is adopted, as is customary in philosophy, if one speaks simultaneously of "content of experience" and "physical state" ("matter" and "spirit," "body" and "soul," "mental" and "physical," "acts of consciousness" and "intentional objects of consciousness"), then contradictions are unavoidable.]

When all contradictions and pseudo-questions have been eliminated by using the formal mode, the problem still remains of analyzing the reciprocal inferential relations between physical language and protocol language. We have previously mentioned that if a sufficient number of physical statements are given, a statement in protocol language can be deduced. A more precise consideration now shows that the simplest form of such deduction is found when physical statements describe the state of the body of the person in question. All other cases of deduction are more complicated and can be reduced to this case. (In describing the state of the body, the state of the central nervous system and especially the brain is the most important, but further details are unnecessary for our argument.) For example, a protocol statement p : "red now (seen by S)" can be deduced from a definite description of the state of S 's body.

The reader may still hesitate, feeling that such a deduction is utopian and would need full knowledge of the physiology of the central nervous system for its performance. This is not however the case; derivation of the required physical statements is already possible and is achieved in everyday life whenever communication occurs. It is true that what we know in such cases of the physical situation of other persons' bodies cannot as yet be formulated as a numerical distribution of physical coefficients of state but it can be formulated in other expressions of the physical language, which are just what we require. Let us, e.g. denote by "seeing red" that state of the human body characterized by the fact that certain specified (physical) reactions appear in answer to certain specified (physical) stimuli. (For example: stimulus: the sounds "What do you see now?" reaction: the sound, "red." Stimulus, the sounds, "Point out on this table of colours the colour you have just seen"; reaction: the finger points to some definite part of the table. Here all those reactions must be counted that are usually regarded as necessary and sufficient criteria for anyone to be "seeing red now.") It is true that we do not know the numerical distribution of the physical coefficients which characterize the human body in this state of "seeing red" but we do know many physical events which often occur either as cause (e.g. bringing a poppy before the eyes of the person concerned) or as effect of such a state. (Examples of effects: certain speech-movements; applying a brake in certain situations.) Hence we can first recognize that a human body is in that state and then predict what other states of this body may be expected to occur.

If P be a physical statement: "The body S is now seeing red"; P is, in the first instance, distinguished from a singular physical statement, in describing not a single point of space-time but an extended spatio-temporal

region, viz. the body; it is further distinguished by corresponding, not to a definite numerical distribution of the coefficients of physical states involved in natural laws, but to a large class of such distributions (whose composition is as yet unknown). If a physical statement is singular in the strict sense, no statement of the protocol language can be deduced from it, nor conversely. But if P is the statement described, the protocol statement p : "Red (is being seen by S) now" can be deduced from P and also conversely p from P . In other words p can be translated into P , they both have the same content. (The syntactical concept "of the same content" is defined as "reciprocally inferable.")

Hence, every statement in the protocol language of S can be translated into a physical statement and indeed into one which describes the physical state of S 's body. In other words there is a correlation between S 's protocol language and a very special sub-language of the physical language. This correlation is such that if any statement from S 's protocol language is true the corresponding physical statement holds intersubjectively and conversely. Two languages isomorphic in this fashion differ only by the sounds of their sentences.

On the basis of this isomorphy we can say *the protocol language is a sub-language of the physical language*. The statement previously made (in the material mode at the time), that the protocol languages of various persons are mutually exclusive, is still true in a certain definite sense: they are, respectively, non-overlapping sub-sections of the physical language. The reciprocal interdependence of the various protocol languages which could not be explained in terms of the previous material account is now seen to be a result of the rules of transformation inside the physical language (including the system of natural laws).

If the result thus obtained, of the identity of content of P and p , be formulated once again in the two modes, i.e.

" P can be inferred from p , and conversely"

" P and p describe the same state of affairs"

the material formulation will again provoke the old criticisms. Our previous arguments have prepared us to take a critical attitude towards this formulation. But we will now consider in greater detail the materially formulated objections, for this is the critical point in the argument on which our thesis is based.

Let us assume that S_2 makes a report, based on physical observations, of the events in S_1 's body yesterday. Then (in the material mode), S_1 will not accept this report as a complete account of yesterday's section of his life. He will say that although the report describes his movements, gestures, facial expressions, changes in his nervous system and in other organs it leaves out his experiences, perceptions, thoughts, memories, etc. He will

add that these experiences must necessarily be lacking in S_2 's report since S_2 cannot discover them or at least cannot obtain them by physical observation. Now, we will assume that S_2 introduces by definitions, terms such as "seeing red" into the physical language. He can then formulate a part of his report with the help of such expressions in such a way that it runs identically with S_1 's protocol. In spite of this S_1 will not accept this new report. He will object that although it is true that S_2 now uses expressions such as "joy," "red," "memory," etc. he *means* something else than S_1 does by the same words in his protocol; the meanings of the expressions are different. For S_2 he says, they denote physical properties of a human body, for himself, personal experiences.

This is a typical objection whose form is familiar to all those occupied with the logical analysis of the statements and concepts of science. If we succeed in demonstrating that some scientific term or other reduces by virtue of its definition to some complex of other terms and therefore denotes the same as the latter, the objection is always made against us that "we *mean* something else." If we show that two definite statements can be deduced one from the other and therefore have the same content, or (in the material form) say the same thing, we hear again and again "but we *mean* something different when we use the first and when we use the second." We know that this objection rests upon a confusion between what is expressed by a statement and the images we associate with the statement (between logical content and image content). (Cf. Carnap: *Scheinprobleme in der Philosophie*.)

The same can be said of the present objection. S_1 connects different associations with the statements P and p respectively for, on account of their linguistic formulation, P is thought of in connection with physical statements whereas p is associated with the protocol. This difference in associations is however no argument against the thesis that the two statements have the same content (i.e. express the same), for the content of a statement is constituted by the possibility of inferring other statements from it. If the same statements can be inferred from two given statements they must both have the same content, independently of the images and conceptions that we are accustomed to associate with them.

We must now throw more light on the question of the relation between the protocol statement p to the corresponding physical statement P_1 where both are about physical objects. Let us choose p to be "A red sphere is lying on the table here" and, for P_1 , "A red sphere (i.e. an object having certain physical properties) is lying on the table." p has not the same content as P_1 , for it is possible to have an hallucination of a sphere when there is none on the table, or, conversely, the sphere can be on the table unseen. But p has the same content as another physical statement P_2 , viz., "S's body is now in physical situation, Z ." The situation Z is specified by various terms in-

cluding e.g. (1) The stimulus "What do you see?" is followed by the reaction consisting of the movements, etc. belonging to the sounds "a red sphere on the table"; (2) if a red sphere is laid on the table and S is put in a suitable situation Z occurs. P_1 can in certain cases be inferred from P_2 ; this necessitates using the definition of Z and suitable natural laws. The argument is from an effect to an habitual cause as used both in physics and in everyday life. Since P_2 can be inferred from p (because they have the same content), P_1 can be indirectly inferred from p . The usual interpretation of the protocol statement as referring to a certain condition of the person's environment is therefore an indirect interpretation compounded of the direct reference (to the state of the body) and an appeal to causality.

The conclusion of our discussion is that not only the languages of the various departments of science but also the protocol languages of all persons are parts of the physical language.

All statements whether of the protocol, or of the scientific system consisting of a system of hypotheses related to the protocol, can be translated into the physical language. The physical language is therefore a universal language and, since no other is known, the language of all science.

7. UNIFIED SCIENCE IN PHYSICAL LANGUAGE

Our view that protocols constitute the basis of the entire scientific edifice might be termed *methodical positivism*; and more specifically as *methodological solipsism*, inasmuch as every subject can use only his own protocol as a basis. (It is true, S_1 can utilize also the protocol of S_2 ; and this procedure is considerably simplified by embedding both protocol languages into the physical language. However, this utilization is an indirect one; S_1 describes in his protocol the experience of observing a written document of a specified wording.) Similarly, the thesis that the physical language is the universal language might be denoted as *methodical materialism*. The adjective "methodical" is intended to express the fact that we are referring to a thesis which speaks simply of the logical possibility of certain linguistic transformations and derivations and not at all of the "reality" or "appearance" (the "existence" or the "non-existence") of the "given," the "mental" or the "physical." Pseudo-statements of this kind occasionally occur in classical formulations of positivism and materialism. They will be eliminated directly they are recognized as metaphysical admixtures; this is in the spirit of the founders of these movements who were the enemies of all metaphysics. Such admixtures can be formulated only in the material mode and by eliminating them we obtain methodical positivism and methodical materialism in the sense defined. When the two views are so purified they

are, as we have seen, in perfect harmony, whereas positivism and materialism in their historic dress have often been regarded as incompatibles.⁵

Our approach has often been termed "positivist"; it might equally well be termed "materialist." No objection can be made to such a title provided that the distinction between the older form of materialism and methodical materialism—the same theory in a purified form—is not neglected. Nevertheless, for the sake of clarity, we would prefer the name of "*physicalism*."⁶ For our theory is that the physical language is the universal language and can therefore serve as the basic language of science.

The physicalist thesis should not be misunderstood to assert that the terminology used by physicists can be applied in every department of science. It is convenient, of course, for each department to have a special terminology adapted to its distinct subject matter. All our thesis asserts is that immediately these terminologies are arranged in the form of a system of definitions they must ultimately refer back to physical terms. For the sake of precision we might supplement or replace the term "physical language" by the term "*physicalistic language*"; denoting by the latter the universal language which contains not only physical terms (in the narrow sense) but also all the various terminologies (of biology, psychology, sociology, etc.) understood as reduced by definitions to their basis in physical determinations.

If we have a single language for the whole of science the cleavage between different departments disappears. Hence the thesis of physicalism leads to the thesis of the *unity of science*. Not the physicalist language alone but any universal language would effect a unification of science but no such language other than the physicalist is known. The possibility of setting up such a language must now, however, be excluded. Its construction would involve the determination of its vocabulary and of its syntax, including rules for transformations inside the language and for inferring protocol statements. Moreover, in accordance with our previous discussion, every proposition *P* of this language in order to have any sense must allow protocol statements to be inferred according to stated rules. In that case it would be possible, in view of the inferential connection between physical language and protocol language, to construct a statement *P*₁ of the physical language in such a way that all those statements of the protocol language could be inferred from it which could be inferred from *P*. The two statements *P* and *P*₁ of the two different systematic languages would then be so related that in every case where *P* was true *P*₁ would also be true, and conversely. Hence *P* could be translated into *P*₁, and conversely.

In general,

5. Cf. Carnap, *Der Logische Aufbau der Welt*, p. 245 ff. Philipp Frank, "Das Kausalgesetz und sein Grenzen," *Schr. Z. wiss. Weltauff.*, Vol. VI, Vienna, 1932, p. 270 ff.

6. Neurath, *loc. cit.*

every statement in the new language could be translated into a statement of the physical language and conversely.

every statement in the new language could be interpreted as having the same sense as a statement of the physical language, i.e. every statement of the new language would refer to physical facts, to spatio-temporal events.

Hence, every systematic language of this kind can be translated into the physical language and can be interpreted as a portion of the physical language in an altered dress.

Because the physical language is thus the basic language of science *the whole of science becomes physics*. This is not to be understood as if it were already certain that the present system of physical laws is sufficient to explain all phenomena. It means

every scientific statement can be interpreted, in principle, as a physical statement, i.e. it can be brought into such a form that it correlates a certain numerical value (or interval, or probability distribution of values) of a coefficient of state to a set of values of position coordinates (or into the form of a complex of such statements).

An explanation, i.e. the deduction of a scientific statement, consists of deducing it from a law of the same form as physical laws, i.e. from a general formula for inferring singular statements of the kind specified.

every scientific fact can be interpreted as a physical fact, i.e. as quantitatively determinable property of a spatio-temporal position (or as a complex of such properties).

Every scientific explanation of fact occurs by means of a law, i.e. by means of a formula which expresses the fact that situations or events of specified kind in any spatio-temporal region are accompanied by specified events in associated regions related in specified fashion.

It is specifically for *explaining* statements (or facts) by means of laws that a unitary language is essential. It is theoretically always possible inside the total system of physics,

to find an explanation for every singular statement, i.e. a law by means of which this statement (or a corresponding probability statement) can be inferred from other propositions based on the protocol.

to find an explanation for every single fact, i.e. a law in accordance with which this fact is implied (with some degree of probability) by the existence of other, known, facts.

For our discussion, it is of no importance whether these laws take the form of unique determinations as assumed in classical physics (determinism) or, alternately, as assumed in present day physics, determine the probability of certain value distributions of parameters (statistical laws of quantum mechanics).

In contrast to the universality of physics cases arise in every partial language which can be expressed in that language but are fundamentally incapable of explanation in that language alone,

e.g. in psychology where no explanatory law can be formulated of a statement of the kind "Mr. *A* is now seeing a red circle" since the explanation must deduce this statement from statements such as "A red sphere is lying before Mr. *A*" and "Mr. *A* has his eyes open," etc.

e.g. a psychological event such as a perception can be described but not explained; for such an event is conditioned not only by other mental events but also by physical and physiological events.

The *prediction* of an unknown is similar to the explanation of a known statement or event, viz. derivation with the help of laws. Hence partial languages are not sufficient for prediction and a unitary language is necessary. If our thesis that there is a unitary language were false, the practical application of science to most regions would be crippled. The thorough applicability of science is insured only by the fact that physical language supplies the basis for unified science.

The thesis of *the unity of science* has nothing to say against the practical separation of various regions for the purposes of division of labour. It is directed only against the usual view that in spite of the many relations between the various regions they themselves are fundamentally distinct in subject matter and methods of investigation. In our view these differences of the various regions rest only upon the uses of different definitions, i.e. of different linguistic forms in various regions, while the statements and words, the facts and objects of *the various branches of science are fundamentally the same kind. For all branches are part of the unified science, of physics.*

ADDENDA (1961)

The following remarks were added by Professor Carnap for this volume.

1. Addendum to Section 2: Languages. The formal theory of language here indicated was afterwards elaborated in the book *Logical Syntax of Language* (German edition, 1934, English translation, 1937). The thesis that the logical analysis of language must be purely formal and hence syntactical was later recognized as too narrow. It was broadened through the development of semantics as a theory of truth and meaning (*Introduction to Semantics*, 1942; the changes in the views concerning the nature of logical analysis and of philosophy are specified in section 39 of this book).

2. Addendum to Section 5. The thesis of physicalism, asserting the universal character of the physical language, is still maintained today in its essentials. But the details of its formulation have undergone some modifi-

cations. The present conception of physicalism, especially in its application to psychology, and the arguments for it, are represented in the two articles by Herbert Feigl: (1) "Physicalism, Unity of Science and the Foundations of Psychology," in: P. A. Schilpp (ed.), *The Philosophy of Rudolf Carnap*, forthcoming; see also my reply to Feigl in the same volume; (2) "The 'Mental' and the 'Physical,'" in vol. II of *Minnesota Studies in Philosophy of Science*, 1958.

The most important modification concerns the relation between the terms of the scientific vocabularies of physics and the other branches of empirical science, including psychology, on the one hand, and, on the other, the terms of the thing language (e.g., "hard," "hot," etc.). The present paper asserts that the former terms are *definable* on the basis of the latter. I soon recognized that this was an oversimplification. In the article "Testability and Meaning" (*Philosophy of Science*, 3 and 4, 1936-1937, later published separately; see sec. 15) reducibility through a kind of conditional definitions took the place of explicit definability. In recent years the relation, now described as that between theoretical terms and terms for observables, has been made still more flexible (see the article "The Methodological Character of Theoretical Concepts" in: H. Feigl and M. Scriven (eds.), *Minnesota Studies*, vol. I, 1956).

Philosophy and Logical Syntax

by **RUDOLF CARNAP**

I. THE REJECTION OF METAPHYSICS

¶ 1. Verifiability

The problems of philosophy as usually dealt with are of very different kinds. From the point of view which I am here taking we may distinguish mainly three kinds of problems and doctrines in traditional philosophy. For

Reprinted, with the kind permission of Professor Carnap and C. K. Ogden's executors, from *Philosophy and Logical Syntax* (Psyche Miniatures), London, 1935. The present version incorporates a number of terminological improvements suggested by Professor Carnap.

the sake of simplicity we shall call these parts *Metaphysics*, *Psychology*, and *Logic*. Or, rather, there are not three distinct regions, but three sorts of components which in most theses and questions are combined: a meta-physical, a psychological, and a logical component.

The considerations that follow belong to the third region: we are here carrying out *Logical Analysis*. The function of logical analysis is to analyse all knowledge, all assertions of science and of everyday life, in order to make clear the sense of each such assertion and the connections between them. One of the principal tasks of the logical analysis of a given statement is to find out the method of verification for that statement. The question is: What reasons can there be to assert this statement; or: How can we become certain as to its truth or falsehood? This question is called by the philosophers the epistemological question; epistemology or the philosophical theory of knowledge is nothing other than a special part of logical analysis, usually combined with some psychological questions concerning the process of knowing.

What, then, is the method of verification of a statement? Here we have to distinguish between two kinds of verification: direct and indirect. If the question is about a statement which asserts something about a present perception, e.g. "Now I see a red square on a blue ground," then the statement can be tested directly by my present perception. If at present I do see a red square on a blue ground, the statement is directly verified by this seeing; if I do not see that, it is disproved. To be sure, there are still some serious problems in connection with direct verification. We will however not touch on them here, but give our attention to the question of indirect verification, which is more important for our purposes. A statement *P* which is not directly verifiable can only be verified by direct verification of statements deduced from *P* together with other already verified statements.

Let us take the statement *P*₁: "This key is made of iron." There are many ways of verifying this statement: e.g.: I place the key near a magnet; then I perceive that the key is attracted. Here the deduction is made in this way:

- Premises:* *P*₁: "This key is made of iron"; the statement to be examined.
*P*₂: "If an iron thing is placed near a magnet, it is attracted"; this is a physical law, already verified.
*P*₃: "This object—a bar—is a magnet"; statement already verified.
*P*₄: "The key is placed near the bar"; this is now directly verified by our observation.

From these four premises we can deduce the conclusion:

*P*₅: "The key will now be attracted by the bar."

This statement is a prediction which can be examined by observation. If we look, we either observe the attraction or we do not. In the first case we have found a positive instance, an instance of verification of the statement P_1 under consideration; in the second case we have a negative instance, an instance of disproof of P_1 .

In the first case the examination of the statement P_1 is not finished. We may repeat the examination by means of a magnet, i.e. we may deduce other statements similar to P_5 by the help of the same or similar premises as before. After that, or instead of that, we may make an examination by electrical tests, or by mechanical, chemical, or optical tests, etc. If in these further investigations all instances turn out to be positive, the certainty of the statement P_1 gradually grows. We may soon come to a degree of certainty sufficient for all practical purposes, but *absolute* certainty we can never attain. The number of instances deducible from P_1 by the help of other statements already verified or directly verifiable is infinite. Therefore there is always a possibility of finding in the future a negative instance, however small its probability may be. Thus the statement P_1 *can never be completely verified*. For this reason it is called an hypothesis.

So far we have considered a similar statement concerning one single thing. If we take a universal statement concerning all things or events at whatever time and place, a so-called natural *law*, it is still clearer that the number of examinable instances is infinite and so the statement is an hypothesis.

Every assertion P in the wide field of science has this character, that it either asserts something about present perceptions or other experiences, and therefore is verifiable by them, or that statements about future perceptions are deducible from P together with some other statements already verified. If a scientist should venture to make an assertion from which no perceptual statements could be deduced, what should we say to that? Suppose, e.g., he asserts that there is not only a gravitational field having an effect on bodies according to the known laws of gravitation, but also a levitational field, and on being asked what sort of effect this levitational field has, according to his theory, he answers that there is no observable effect; in other words, he confesses his inability to give rules according to which we could deduce perceptual statements from his assertion. In that case our reply is: your assertion is no assertion at all; it does not speak about any thing; it is nothing but a series of empty words; it is simply without sense.

It is true that he may have images and even feelings connected with his words. This fact may be of psychological importance; logically, it is irrelevant. What gives theoretical meaning to a statement is not the attendant images and thoughts, but the possibility of deducing from it perceptual statements, in other words, the possibility of verification. To give sense to a statement the presence of images is not sufficient; it is not even necessary.

We have no actual image of the electromagnetic field, nor even, I should say, of the gravitational field. Nevertheless the statements which physicists assert about these fields have a perfect sense, because perceptual statements are deducible from them. I by no means object to the statement just mentioned about a levitational field that we do not know how to imagine or conceive such a field. My only objection to that statement is that we are not told how to verify it.

II 2. *Metaphysics*

What we have been doing so far is *logical analysis*. Now we are going to apply these considerations not to statements of physics as before, but to statements of *metaphysics*. Thus our investigation belongs to *logic*, to the third of the three parts of philosophy spoken about before, but the *objects* of this investigation belong to the first part.

I will call *metaphysical* all those statements which claim to represent knowledge about something which is over or beyond all experience, e.g. about the real Essence of things, about Things in themselves, the Absolute, and such like. I do not include in metaphysics those theories—sometimes called metaphysical—whose object is to arrange the most general statements of the various regions of scientific knowledge in a well-ordered system; such theories belong actually to the field of empirical science, not of philosophy, however daring they may be. The sort of statements I wish to denote as metaphysical may most easily be made clear by some examples: "The Essence and Principle of the world is Water," said Thales; "Fire," said Heraclitus; "the Infinite," said Anaximander; "Number," said Pythagoras. "All things are nothing but shadows of eternal ideas which themselves are in a spaceless and timeless sphere," is a doctrine of Plato. From the monists we learn: "There is only one principle on which all that is, is founded"; but the dualists tell us: "There are two principles." The materialists say: "All that is, is in its essence material," but the spiritualists say: "All that is, is spiritual." To metaphysics (in our sense of the word) belong the principal doctrines of Spinoza, Schelling, Hegel, and—to give at least one name of the present time—Bergson.

Now let us examine this kind of statement from the point of view of *verifiability*. It is easy to realize that such statements are not verifiable. From the statement: "The Principle of the world is Water" we are not able to deduce any statement asserting any perceptions or feelings or experiences whatever which may be expected for the future. Therefore the statement, "The Principle of the world is Water," asserts nothing at all. It is perfectly analogous to the statement in the fictitious example above about the levitational field and therefore it has no more sense than that

statement. The water-metaphysician—as we may call him—has no doubt many images connected with his doctrine; but they cannot give sense to the statement any more than they could in the case of the levitational field. Metaphysicians cannot avoid making their statements nonverifiable, because if they made them verifiable, the decision about the truth or falsehood of their doctrines would depend upon experience and therefore belong to the region of empirical science. This consequence they wish to avoid, because they pretend to teach knowledge which is of a higher level than that of empirical science. Thus they are compelled to cut all connection between their statements and experience; and precisely by this procedure they deprive them of any sense.

¶ 3. *Problems of Reality*

So far I have considered only examples of such statements as are usually called metaphysical. The judgment I have passed on these statements, namely, that they have no empirical sense, may perhaps appear not very astonishing, and even trivial. But it is to be feared that the reader will find it somewhat more difficult to agree when I now proceed to apply that judgment also to philosophical doctrines of the type usually called epistemological. I prefer to call them also metaphysical because of their similarity, in the point under consideration, to the statements usually so called. What I have in mind are the doctrines of realism, idealism, solipsism, positivism and the like, taken in their traditional form as asserting or denying the reality of something. The realist asserts the reality of the external world, the idealist denies it. The realist—usually at least—asserts also the reality of other minds, the solipsist—an especially radical idealist—denies it, and asserts that only his own mind or consciousness is real. Have these assertions sense?

Perhaps it may be said that assertions about the reality or unreality or something occur also in empirical science, where they are examined in an empirical way, and that therefore they must have sense. This is quite true. But we have to distinguish between two concepts of reality, one occurring in empirical statements and the other occurring in the philosophical statements just mentioned. When a zoologist asserts the reality of kangaroos, his assertion means that there are things of a certain sort which can be found and perceived at certain times and places; in other words that there are objects of a certain sort which are elements of the space-time-system of the physical world. This assertion is of course verifiable; by empirical investigation every zoologist arrives at a positive verification, independent of whether he is a realist or an idealist. Between the realist and the idealist there is full agreement as to the question of the reality of things of a speci-

fied sort, i.e., of the possibility of locating elements of that sort in the system of the physical world. The disagreement begins only when the question about the reality of the physical world as a whole is raised. But this question has no sense, because the reality of anything is nothing else than the possibility of its being placed in a certain system, in this case, in the space-time-system of the physical world, and such a question has sense only if it concerns elements or parts, not if it concerns the system itself.

The same result is obtained by applying the criterion explained before: the possibility of deducing perceptual statements. While from the assertion of the reality or the existence of kangaroos we *can* deduce perceptual statements, from the assertion of the reality of the physical world this is not possible; neither is it possible from the opposite assertion of the unreality of the physical world. Therefore both assertions have no empirical content—no sense at all. It is to be emphasized that this criticism of having no sense applies equally to the assertion of unreality. Sometimes the views of the *Vienna Circle* have been mistaken for a denial of the reality of the physical world, but we make no such denial. It is true that we reject the thesis of the reality of the physical world; but we do not reject it as false, but as having no sense, and its idealistic *anti*-thesis is subject to exactly the same rejection. We neither assert nor deny these theses, we reject the whole question.

All the considerations which apply to the question of the reality of the physical world apply also to the other philosophical questions of reality, e.g. the reality of other minds, the reality of the given, the reality of universals, the reality of qualities, the reality of relations, the reality of numbers, etc. If any philosophical thesis answering any of these questions positively or negatively is added to the system of scientific hypotheses, this system will not in the least become more effective; we shall not be able to make any further prediction as to future experiences. Thus all these philosophical theses are deprived of empirical content, of theoretical sense; they are pseudo-theses.

If I am right in this assertion, the philosophical problems of reality—as distinguished from the empirical problems of reality—have the same logical character as the problems (or rather, pseudo-problems) of transcendental metaphysics earlier referred to. For this reason I call those problems of reality not epistemological problems—as they usually are called—but metaphysical.

Among the metaphysical doctrines that have no theoretical sense I have also mentioned positivism, although the *Vienna Circle* is sometimes designated as positivistic. It is doubtful whether this designation is quite suitable for us. In any case we do not assert the thesis that only the given is real, which is one of the principal theses of traditional positivism. The name “logical positivism” seems more suitable, but this also can be misunder-

stood. At any rate it is important to realize that our doctrine is a logical one and has nothing to do with metaphysical theses of the reality or unreality of anything whatever. What the character of a *logical* thesis is, will be made clear in the following chapters.

¶ 4. *Ethics*

One division of philosophy, which by some philosophers is considered the most important, has not been mentioned at all so far, namely, the philosophy of values, with its main branch, moral philosophy or *Ethics*. The word "Ethics" is used in two different senses. Sometimes a certain empirical investigation is called "Ethics," viz. psychological and sociological investigations about the actions of human beings, especially regarding the origin of these actions from feelings and volitions and their effects upon other people. Ethics in this sense is an empirical, scientific investigation; it belongs to empirical science rather than to philosophy. Fundamentally different from this is ethics in the second sense, as the philosophy of moral values or moral norms, which one can designate normative ethics. This is not an investigation of facts, but a pretended investigation of what is good and what is evil, what it is right to do and what it is wrong to do. Thus the purpose of this philosophical, or normative, ethics is to state norms for human action or judgments about moral values.

It is easy to see that it is merely a difference of formulation, whether we state a norm or a value judgment. A norm or rule has an imperative form, for instance: "Do not kill!" The corresponding value judgment would be: "Killing is evil." This difference of formulation has become practically very important, especially for the development of philosophical thinking. The rule, "Do not kill," has grammatically the imperative form and will therefore not be regarded as an assertion. But the value statement, "Killing is evil," although, like the rule it is merely an expression of a certain wish, has the grammatical form of a declarative sentence. Most philosophers have been deceived by this form into thinking that a value statement is really an assertive statement, and must be either true or false. Therefore they give reasons for their own value statements and try to disprove those of their opponents. But actually a value statement is nothing but a command in a misleading grammatical form. It may have effects upon the actions of men, and these effects may either be in accordance with our wishes or not; but it is neither true nor false. It does not assert anything and can neither be proved nor disproved.

This is revealed as soon as we apply to such statements our method of logical analysis. From the statement "Killing is evil" we cannot deduce any statement about future experiences. Thus this statement is not verifiable

and has no theoretical sense, and the same thing is true of all other value statements.

Perhaps somebody will contend in opposition that the following statement is deducible: "If a person kills anybody he will have feelings of remorse." But this statement is in no way deducible from the statement "Killing is evil." It is deducible only from psychological statements about the character and the emotional reactions of the person. These statements are indeed verifiable and not without sense. They belong to psychology, not to philosophy; to psychological ethics (if one wishes to use this word), not to philosophical or normative ethics. The statements of normative ethics, whether they have the form of rules or the form of value statements, have no theoretical sense, are not scientific statements (taking the word scientific to mean any assertive statement).

To avoid misunderstanding it must be said that we do not at all deny the possibility of importance of a scientific investigation of value statements as well as of acts of valuation. Both of these are acts of individuals and are, like all other kinds of acts, possible objects of empirical investigation. Historians, psychologists, and sociologists may give analyses and causal explanations of them, and such historical and psychological statements about acts of valuation and about value statements are indeed meaningful scientific statements which belong to ethics in the first sense of this word. But the value statements themselves are here only objects of investigation; they are not statements in these theories, and have, here as elsewhere, no theoretical sense. Therefore we assign them to the realm of metaphysics.

¶ 5. *Metaphysics as Expression*

Now we have analysed the statements of metaphysics in a wide sense of this word, including not only transcendental metaphysics, but also the problems of philosophical reality and lastly normative ethics. Perhaps many will agree that the statements of all these kinds of metaphysics are not verifiable, i.e., that their truth cannot be examined by experience. And perhaps many will even grant that for this reason they have not the character of scientific statements. But when I say that they are without sense, assent will probably seem more difficult. Someone may object: these statements in the metaphysical books obviously have an effect upon the reader, and sometimes a very strong effect; therefore, they certainly *express* something, but nevertheless they have no sense, no theoretical content.

We have here to distinguish two functions of language, which we may call the expressive function and the representative or cognitive function. Almost all the conscious and unconscious movements of a person, including his linguistic utterances, express something of his feelings, his present mood, his temporary or permanent dispositions to reaction, and the like. There-

fore, we may take almost all his movements and words as symptoms from which we can infer something about his feelings or his character. That is the expressive function of movements and words. But besides that, a certain portion of linguistic utterances (e.g. "this book is black"), as distinguished from other linguistic utterances and movements, has a second function: these utterances represent a certain state of affairs; they tell us that something is the case; they assert something, they predicate something, they judge something.

In special cases, this asserted state may be the same as that which is inferred from a certain expressive utterance; but even in such cases we must sharply distinguish between the assertion and the expression. If, for instance, somebody is laughing we may take this as a symptom of his merry mood; if, on the other hand, he tells us without laughing: "Now I am merry," we can learn from his words the same thing which we inferred in the first case from his laughing. Nevertheless, there is a fundamental difference between the laughter and the words: "I am merry now." This linguistic utterance *asserts* the merry mood, and therefore it is either true or false. The laughter does not assert merry mood but *expresses* it. It is neither true nor false, because it does not assert anything, although it may be either genuine or deceptive.

Now many linguistic utterances are analogous to laughing in that they have only an expressive function, no representative function. Examples of this are cries like "Oh, Oh" or, on a higher level, lyrical verses. The aim of a lyrical poem in which occur the words "sunshine" and "clouds," is not to inform us of certain meteorological facts, but to express certain feelings of the poet and to excite similar feelings in us. A lyrical poem has no assertive sense, no theoretical sense, it does not contain knowledge.

The meaning of our anti-metaphysical thesis may now be more clearly explained. This thesis asserts that metaphysical statements—like lyrical verses—have only an expressive function, but no representative function. Metaphysical statements are neither true nor false, because they assert nothing, they contain neither knowledge nor error, they lie completely outside the field of knowledge, of theory, outside the discussion of truth or falsehood. But they are, like laughing, lyrics, and music, expressive. They express not so much temporary feelings as permanent emotional or volitional dispositions. Thus, for instance, a metaphysical system of monism may be an expression of an even and harmonious mode of life, a dualistic system may be an expression of the emotional state of someone who takes life as an eternal struggle; an ethical system of rigorism may be expressive of a strong sense of duty or perhaps of a desire to rule severely. Realism is often a symptom of the type of constitution called by psychologists extroverted, which is characterized by easily forming connections with men and things; idealism, of an opposite constitution, the so-called introverted type, which

has a tendency to withdraw from the unfriendly world and to live within its own thoughts and fancies.

Thus we find a great similarity between metaphysics and lyrics. But there is one decisive difference between them. Both have no representative function, no theoretical content. A metaphysical statement, however—as distinguished from a lyrical verse—seems to have such a content, and by this not only is the reader deceived, but the metaphysician himself. He believes that in his metaphysical treatise he has asserted something, and is led by this into argument and polemics against the statements of some other metaphysician. A poet, however, does not assert that the verses of another are wrong or erroneous; he usually contents himself with calling them bad.

The non-theoretical character of metaphysics would not be in itself a defect; all arts have this non-theoretical character without thereby losing their high value for personal as well as for social life. The danger lies in the *deceptive* character of metaphysics; it gives the illusion of knowledge without actually giving any knowledge. This is the reason why we reject it.

¶ 6. *Psychology*

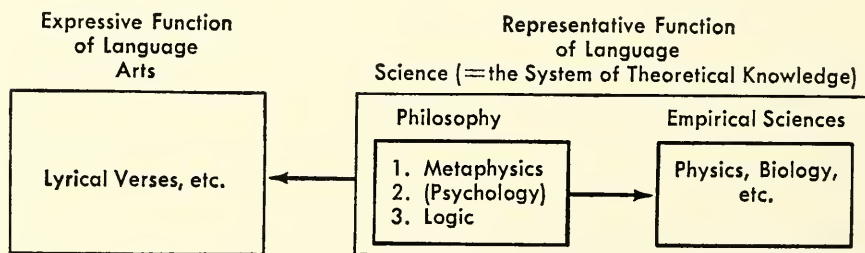
When we have eliminated metaphysical problems and doctrines from the region of knowledge or theory, there remain still two kinds of philosophical questions: psychological and logical. Now we shall eliminate the psychological questions also, not from the region of knowledge, but from philosophy. Then, finally, philosophy will be reduced to logic alone (in a wide sense of this word).

Psychological questions and statements are certainly not without sense. From such statements we can deduce other statements about future experiences and by their help we can verify the psychological statements. But the statements of psychology belong to the region of empirical science in just the same way as do the statements of chemistry, biology, history and the like. The character of psychology is by no means more philosophical than that of the other sciences mentioned. When we look at the historical development of the sciences we see that philosophy has been the mother of them all. One science after another has been detached from philosophy and has become an independent science. Only in our time has the umbilical cord between psychology and philosophy been cut. Many philosophers have not yet realized quite clearly that psychology is no longer an embryo, but an independent organism, and that psychological questions have to be left to empirical research.

Of course, we have no objection to connecting psychological and logical

investigations, any more than to connecting investigations of any scientific kind. We reject only the confusion of the two kinds of questions. We demand that they should be clearly distinguished even where in practice they are combined. The confusion sometimes consists in dealing with a logical question as if it were a psychological one. This mistake—called *psychologism*—leads to the opinion that logic is a science concerning thinking, that is, either concerning the actual operation of thinking or the rules according to which thinking should proceed. But, as a matter of fact, the investigation of operations of thinking as they really occur is a task for psychology and has nothing to do with logic. And learning how to think aright is what we do in every other science as well as in logic. In astronomy we learn how to think aright about stars; in logic we learn how to think aright about the special objects of logic. What these special objects of logic are, will be seen in the next chapter. In any case, thinking is not an object of logic, but of psychology.

Psychological questions concern all kinds of so-called mental events, all kinds of sensations, feelings, thoughts, images, etc., whether they are conscious or unconscious. These questions of psychology can be answered only by experience, not by philosophising.



¶ 7. Logical Analysis

The only proper task of *philosophy* is *logical analysis*. And now the principal question to be answered here will be: "*What is logical analysis?*" In our considerations so far we have already practised logical analysis: we have tried to determine the character of physical hypotheses, of metaphysical statements (or rather, pseudo-statements), of psychological statements. And now we have to apply logical analysis to logical analysis itself; we have to determine the character of the statements of logic, of those statements which are the results of logical analysis.

The opinion that metaphysical statements have no sense because they do not concern any facts, has already been expressed by *Hume*. He writes in the last chapter of his "Enquiry Concerning Human Understanding" (pub-

lished in the year 1748) as follows: "It seems to me, that the only objects of the abstract sciences or of demonstration, are quantity and number. . . . All other enquiries of men regard only matter of fact and existence; and these are evidently incapable of demonstration. . . . When we run over libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume, of divinity or school metaphysics, for instance; let us ask, Does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matter of fact and existence? No. Commit it then to the flames: for it can contain nothing but sophistry and illusion." We agree with this view of Hume, which says—translated into our terminology—that only the statements of mathematics and empirical science have sense, and that all other statements are without sense.

But now it may perhaps be objected: "How about your own statements? In consequence of your view your own writings, including this book, would be without sense, for they are neither mathematical nor empirical, that is, verifiable by experience." What answer can be given to this objection? What is the character of my statements and in general of the statements of logical analysis? This question is decisive for the consistency of the view which has been explained here.

An answer to the objection is given by Wittgenstein in his book *Tractatus Logico-Philosophicus*. This author has developed most radically the view that the statements of metaphysics are shown by logical analysis to be without sense. How does he reply to the criticism that in that case his own statements are also without sense? He replies by agreeing with it. He writes: "*The result of philosophy is not a number* 'philosophical statements,' but to make statements clear" (p. 77). "My statements are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder after he has climbed up on it.) He must surmount these statements; then he sees the world rightly. Whereof one cannot speak, thereof one must be silent" (p. 189).

I, as well as my friends in the Vienna Circle, owe much to Wittgenstein, especially as to the analysis of metaphysics. But on the point just mentioned I cannot agree with him. In the first place, he seems to me to be inconsistent in what he does. He tells us that one cannot make philosophical statements and that whereof one cannot speak, thereof one must be silent; and then instead of keeping silent, he writes a whole philosophical book. Secondly, I do not agree with his assertion that all his statements are quite as much without sense as metaphysical statements are. My opinion is that a great number of his statements (unfortunately not all of them) have in fact sense; and that the same is true for all statements of logical analysis.

It will be the purpose of the following chapters to give reasons for this

positive answer to the question about the character of philosophical statements, to show a way of formulating the results of logical analysis, a way not exposed to the objection mentioned, and thus to exhibit an *exact method of philosophy*.

II. LOGICAL SYNTAX OF LANGUAGE

¶ 1. "Formal" Theory

In this chapter an explanation will be given of a theory which we will call "logical syntax," and it will be shown how to operate with the syntactical method. Although the word "philosophy" will not here occur, the syntactical method, as we shall try to make clear in the last chapter, brings us to the very basis of philosophy.

The logical syntax of a certain language is to be understood as the formal theory of that language. This needs further explanation. We will call "formal" such considerations or assertions concerning a linguistic expression as are without any reference to sense or meaning. A formal investigation of a certain sentence does not concern the sense of that sentence or the meaning of the single words, but only the kinds of words and the order in which they follow one another. Take, for instance, the sentence: "The book is black." If I assert that this expression consisting of four words is a sentence and further, that the first word is an article, the second a noun, the third a verb, and the fourth an adjective, all these assertions are formal assertions. If, however, I assert that that sentence concerns a book, or that its last word designates a color, then my assertions are *not formal*, because they have to do with the *meaning* of the words. A formal investigation of a language would appear to have very narrow limits. Actually, however, this is not the case, because, as we shall see later many questions and considerations which are expressed in a non-formal way can be formulated in the formal mode.

Such a formal theory of language is, so far as mathematics is concerned, already known by the work of Hilbert. Hilbert has propounded a theory which he calls metamathematics or a theory of proof, and in which the formal method is applied. In this theory of Hilbert, mathematics is dealt with as a system of certain symbols to be operated according to certain rules, and the meaning of the symbols is nowhere spoken of, but only the various kinds of symbols and the formal operations to which they are subjected. Now mathematics is a special part of the whole of language, which includes many other and quite different branches. And the same formal method which Hilbert has applied in his metamathematics to the system of mathematics, we apply in our logical syntax to the whole language-system of

science, or to any special part of it, or to any other language-system whatsoever.

¶ 2. Formation Rules

When we say that the objects of logical syntax are languages, the word "language" is to be understood as the *system of the rules* of speaking, as distinguished from the acts of speaking. Such a language-system consists of two kinds of rules, which we will call formation rules and transformation rules. The formation rules of a certain language-system *S* determine how *sentences* of the system *S* can be constructed out of different kinds of symbols. One of the formation rules of the English language, for instance, determines that a series of four words, first an article, second a noun, third a verb of a certain class, and fourth an adjective, constitutes a sentence. Such a formation rule is obviously similar to grammatical rules, especially to the rules of grammatical syntax. But the usual rules of grammatical syntax are not always strictly formal; for instance, we may cite that rule of Latin grammar which determines that nouns designating women, countries, towns, or trees are of feminine gender. Such reference to the meaning of the words are excluded in logical syntax as distinguished from grammatical syntax.

The totality of the formation rules of a language-system *S* is the same as the definition of the term "sentence of *S*." This definition can be stated in the following form: "A series of words is a sentence of the system *S*, if, and only if, it has either this, that, or the other form." Now for a natural language, such as English, the formation rules can scarcely be given completely; they are too complicated. The logicians, as we know, have made language-systems—or at least frameworks for such—which are much simpler and also much more exact than the natural languages. Instead of words, they use symbols similar to the mathematical symbols. Take, for example, the most developed of these symbolic languages, that constructed by Whitehead and Russell in their work *Principia Mathematica*. Two of the principal formation rules of this language are as follows: (1) an expression consisting of a predicate (that is, one of the small Greek letters, " ϕ ," " ψ ," etc.) and one or more individual variables (the small Roman letters " x ," " y ," etc.) is a sentence; (2) an expression consisting of two sentences and one connecting sign (" \vee ," " \cdot ," " \supset ," " \equiv ") between them is also a sentence.

¶ 3. Transformation Rules

Much more important than the formation rules are the transformation rules. They determine how given sentences may be transformed into others;

in other words: how from given sentences we may *infer* others. Thus, in the English language there is the rule, that from the two sentences:

"all *a* are *b*"
 and "all *b* are *c*"
 we may infer: "all *a* are *c*."

Here only the framework of the sentences is given, not the sentences themselves. In order to make sentences we have to substitute three English nouns in the plural form for the three letters "*a*," "*b*," "*c*." To give an illustration, from the two sentences

"all eagles are birds"
 and "all birds are beasts"
 we may infer: "all eagles are beasts."

In the symbolic language of Whitehead and Russell, we have the following rule. From two sentences of the form

"*A*"
 and "*A* \supset *B*," where " \supset " is the implication-sign
 we may infer: "*B*."

The totality of the transformation rules of a language-system *S* may be formulated as the definition of the term "*direct consequence* in *S*." Thus, the transformation rules of *Principia Mathematica* may be stated as follows: "In the system *PM* a sentence is to be called a direct consequence of a class of other sentences—called premises—if, and only if, one of the following conditions is fulfilled:

1. The sentence has the form "*B*" and the class of premises consists of "*A*" and "*A* \supset *B*";
2. ...;
3. ..."

It is to be noted that an axiom or primitive sentence of a language can also be stated in the form of a rule of inference, and therefore also in the form of a part of the definition of "direct consequence." The difference is only that in this case the class of premises is the null class (i.e., the class which has no numbers). Thus, instead of ruling, "*p* \supset .*p**q*" is to be a primitive sentence of the language *S*," we may say: "*p* \supset .*p**q*" is to be a direct consequence of the null class of premises." If a class *P* of premises is connected with a certain sentence *C* by a chain of sentences in such a way that every sentence of this chain is a direct consequence of some sentences preceding the chain, we call the sentence *C* a *consequence* of the class *P* or

premises. This term "consequence" is, as we shall soon see, one of the most important terms of logical syntax.

We have seen that a language-system is a system of rules of formation and transformation. According to this logical syntax of a language-system *S* consists of two parts: the investigation or analysis of the formation rules of *S*, and that of the transformation rules of *S*. The first part is, as observed above, somewhat similar to grammar, the second part, to logic, especially to the logic of inference or deduction. It is generally supposed that grammar and logic have quite different characters, grammar being concerned with linguistic expressions, and logic with the *meaning* of thoughts or of statements. But in opposition to this the development of modern logic has shown more and more clearly that the rules of inference *can* be expressed in a purely *formal* manner, that is, without any reference to meaning. Our task is merely to draw the consequence from this development and to construct the whole system of logic in a strictly formal way. We shall then have to do neither with thoughts as mental acts nor with their contents, but only with sentences, and with sentences not as vehicles or meaning or sense, but only as series of symbols, of written, spoken, or other signs. It will now be clear why we do not employ here the usual word "proposition." Sometimes it means, not a sentence, but what is expressed by a sentence, and very often it is used ambiguously. Therefore, we prefer to use the word "sentence."

Between logic and grammar, or in other words, between the transformation rules and the formation rules, there is no fundamental difference. Transformation or inference depends only upon the formal character of the sentences, only upon their syntactical form. That is the reason why we apply the name "syntax" not, as is usually done in linguistics, to the formation rules alone, but to the system containing both kinds of rules together.

¶ 4. Syntactical Terms

The terms "sentence" and "direct consequence" are the two primitive terms of logical syntax—or "syntax," as we may briefly call it where there is no danger of misunderstanding. Every other term of syntax can be defined on the basis of these two terms. We will now give the definitions of several syntactical terms which are among the most important, especially, as we shall see later, in the application to philosophical questions.

Given any language-system, or set of formation rules and transformation rules, among the sentences of this language there will be true and false sentences. But we cannot define the terms "true" and "false" in syntax, because whether a given sentence is true or false will generally depend not only upon the syntactical form of the sentence, but also upon experience; that is to say, upon something extra-linguistic. It may be, however, that in

certain cases a sentence is true or false only by reason of the rules of the language. Such sentences we will call *valid* and *contravalid*, respectively.

Our definition of validity is as follows: a sentence is called *valid*, if it is a consequence of the null class of premises. Thus, in the language of Russell, the sentence " $p \vee \sim p$ "—usually called the Principle of the Excluded Middle—is a valid sentence; and so, likewise, are all other sentences for which proofs are given in the *Principia Mathematica*. A proof in this work is a series of sentences of such kind that each sentence of the series is either a primitive sentence or inferred from preceding sentences of the series. Now a primitive sentence is a direct consequence of the null class of premises. Therefore, a proof in *Principia Mathematica* is a chain of direct consequences beginning with the null class of premises and ending with the sentence proved. This proved sentence is thus a consequence of the null class and, therefore—according to our definition—valid.

Turning to the term "*contravalid*": a sentence "*A*" of a certain language system is called *contravalid* if every sentence of this system is a consequence of "*A*." Every sentence of the language of *Principia Mathematica* which can be disproved in this system (e.g., " $p \sim p$ " and " $\sim (p \equiv p)$," is *contravalid*. Disproving a sentence "*A*" consists in showing that a certain sentence "*B*" as well as " $\sim B$," the negation of "*B*" are consequences of "*A*." But from two mutually opposed sentences such as "*B*" and " $\sim B$ " any sentence whatever can be deduced. Therefore, if "*B*" and " $\sim B$ " are consequences of "*A*," every sentence is a consequence of "*A*," and "*A*" is *contravalid*.

We will call a sentence *determinate* if it is either valid or *contravalid*. We will call a sentence *indeterminate* if it is neither valid nor *contravalid*. Thus, the *determinate* sentences are those whose truth-value is determined by the rules of the language. In the language-system of Russell one may construct *indeterminate* sentences by introducing *non-logical* constants. Suppose, for instance, "*a*" and "*b*" to be names of persons, "*S*" to designate the relation of sonship, then "*aSb*" (in words: "*a* is a son of *b*") is an *indeterminate* sentence, because its truth can obviously not be determined by the rules of the system of Russell.

¶ 5. *L-Terms*

In the symbolic languages of modern logic the transformation rules, to which, as has been pointed out above, the primitive sentences also belong, are usually chosen in such a way that they seem to be right for logical or mathematical reasons. But it would likewise be possible to state a language-system which, besides such logical rules, also contained extra-logical ones. Take, for instance, the system of *Principia Mathematica*. In its present form it contains only such primitive sentences and rules of inference as have a purely logical character. Transformation rules of this logical or mathematical

character we will call L-rules. Now we could add to the system of *Principia Mathematica* transformation rules of an extra-logical character, for instance some physical laws as primitive sentences, as, for example, Newton's principles of mechanics, Maxwell's equations of electromagnetics, the two principles of thermodynamics, and such like. In order to have a comprehensive name for the extra-logical transformation rules we will call them physical rules or P-rules.

Thus, a transformation rule of a language is either an L-rule or a P-rule. The distinction of these two kinds of rules is very important. We have only given some rough indications of it, but it is possible to define this distinction in an exact and strictly formal way, that is, without any reference to the sense of the sentences. Omitting this exact definition for the sake of brevity, however, let us simply suppose that there is given a certain language-system, for instance the system of *Principia Mathematica* with the addition of some physical laws as primitive sentences, in which the given transformation rules are already divided into L-rules and P-rules.

We have called a sentence C a consequence of a class P of sentences—the premises—if there is a chain of sentences constructed according to the transformation rules connecting the class P with the sentence C . Suppose now that in a certain case only L-rules are applied; then we call C an L-consequence of P . If, on the other hand, C can be deduced from P only by applying also P-rules; in other words, if C is a consequence, but not an L-consequence, we call C a P-consequence of P . Let us take for example the following class P of two premises:

P_1 : The body A has a mass of 3 grammes.

P_2 : The body B has a mass of 6 grammes.

Then we can deduce from P the following two consequences, among others:

C_1 : The mass of B is double the mass of A .

C_2 : If the same force is acting on A and on B , the acceleration of A will be double that of B .

For the deduction of C_1 we need only L-rules, that is, rules of logic and arithmetic, while for the deduction of C_2 besides these we need P-rules, namely, the laws of mechanics. Therefore, C_1 is an L-consequence, but C_2 , a P-consequence, of the class P or premises.

As we have defined corresponding to the term "consequence," an L-term and a P-term, we may in an analogous way define corresponding L-terms and P-terms for the other general terms already defined. Thus, we will call a sentence which is true by reason of the L-rules alone, L-valid or *analytic*. The exact definition of this term is perfectly analogous to the

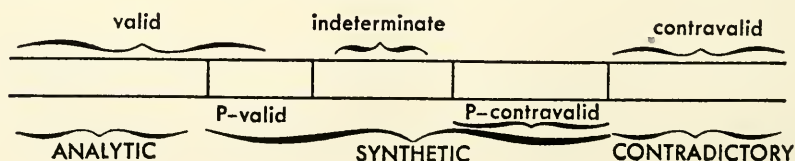
definition of "valid": a sentence is called analytic if it is an L-consequence of the null class of premises. Similarly, we will call a sentence which is false by reason of the L-rules alone, L-contravalid or *contradictory*. The formal definition is as follows: A sentence is called contradictory if every sentence of the language is an L-consequence of the same. A sentence is called L-*determinate* if it is either analytic or contradictory. If, for the determination of the truth or falsehood of a given sentence, the L-rules do not suffice; in other words, if the sentence is not L-determinate, it is called L-indeterminate or *synthetic*. The synthetic sentences are those which assert states of affairs. The terms "analytic" and "synthetic" have already been used in traditional philosophy; they are especially important in the philosophy of Kant; but up till now they have not been exactly defined.

In a language-system which contains only L-rules, for instance in the system of *Principia Mathematica*, each of the defined general terms agrees completely with the corresponding L-term. Thus, every valid sentence (for instance " $p \vee \sim p$ ") is analytic, every contravalid sentence (for instance " $p. \sim p$ ") is contradictory; indeterminate sentences, and only these (for instance, " aSb ," " a is a son of b "), are synthetic.

<i>General Terms</i>	<i>L-Terms</i>	<i>P-Terms</i>
consequence	L-consequence	P-consequence
valid	(L-valid) <i>analytic</i>	P-valid
contravalid	L-contravalid)	P-contravalid
	contradictory	
determinate	L-determinate	
indeterminate	(L-indeterminate)	
	synthetic	
content		
equipollent		
synonymous		

If a sentence is valid, but not analytic, we call it *P-valid*. If a sentence is contravalid, but not contradictory, we call it *P-contravalid*. The other P-terms are not so important.

The terms just defined give a classification of sentences which we may represent by the following scheme:



The totality of the sentences of the language is comprehended in the above diagram. Some of the sentences are either valid or contravalid, according to the transformation rules in general; the others are indeterminate. Among the valid sentences some are analytic, namely, those which are valid on the basis of the L-rules alone; the others are P-valid. In the same way some of the contravalid sentences are contradictory, the others P-contravalid. The sentences which are neither analytic nor contradictory are synthetic. The three L-terms, namely, "analytic," "synthetic" and "contradictory," are very often used in the logical analysis of any scientific theory. Later on we shall consider some examples.

¶ 6. Content

If we wish to characterize the purpose of a given sentence, its contents, its assertive power, so to speak, we have to regard the class of those sentences which are consequences of the given sentence. Among these consequences we may leave aside the valid sentences, because they are consequences of every sentence. We define therefore as follows: the class of the non-valid consequences of a given sentence is called the *content* of this sentence.

The method which we are using here and which we call logical syntax is characterized by limiting itself to terms defined in a strictly formal way. One might perhaps be inclined to think that it is a defect of this formal method not to be able to deal with questions of sense. But in fact this method *is* able to do that, at least in a certain respect. Concerning a given series of signs, for instance a series of words in a word-language, there are two questions of sense. The first is, whether that series of words *has* a sense or not. If here "sense" means "theoretical sense," "assertive sense," then such a question can be answered within the range of formal investigation, namely by the help of the formal, syntactical term "sentence" defined by the formation rules of the language. Secondly, it may be asked *what* sense a given sentence has. This question can be answered by the help of the formal, syntactical term "content" as just defined.

The content of a sentence represents its sense, so far as the word "sense" is intended to designate something of a purely *logical* character. Sometimes by "sense" is meant the kind of thoughts and images that are connected with the given sentence. But in this case the question is a psychological one and has to be examined by the experimental method of psychology. In logical analysis we are not concerned with such questions. All questions of sense having an actually logical character can be dealt with by the formal method of syntax.

Sometimes two sentences of quite unlike wording nevertheless have the same sense, as asserting the same state. We will call such sentences *equipollent*. The formal definition is obvious: two sentences are called equipollent

if they have the same content; in other words, if they are consequences of each other. Similarly, two expressions which are not themselves sentences, but occur in sentences, may have the same sense, the same meaning, in spite of a quite different wording. This relation which we will designate by the term "synonymous," can also be defined in a formal manner: two expressions are called mutually synonymous, if the content of any sentence containing one of them is not changed if we replace that expression by the other. Thus, for instance, the expressions " $5 + 2$ " and " $4 + 3$ " are synonymous, because the content of a sentence will not be changed if we replace in this sentence " $5 + 2$ " by " $4 + 3$ " or *vice versa*.

¶ 7. Pseudo-Object-Sentences

The above are some examples of syntactical terms, all based upon the term "consequence" which is the principal term of syntax. The task of syntax is to state such definitions as those of the given examples and to analyze given sentences, proofs, theories, and the like, by the help of such syntactical terms. The results of such an analysis are then formulated as *syntactical sentences* having for instance the following form: "Such and such a sentence contained in a certain theory is synthetic, but a certain other sentence is merely analytic," or: "This particular word of such a theory is synonymous, but not L-synonymous, with that and that combination of words," and so on.

If sentences of this simple form containing well-defined syntactical terms are given, it is easy to see that they are syntactical sentences. But there are other sentences which *seem* to be of quite a different kind and nevertheless really are syntactical. This fact is very important, especially in dealing with philosophical sentences. I have already mentioned my opinion, which will be explained in the next chapter, that philosophical sentences belong to syntax. It must be confessed that this opinion seems not to agree with obvious facts, for philosophical sentences—even after the elimination of metaphysics—seem to concern not only the form of linguistic expressions but also, and perhaps mainly, quite other objects, such as the structure of space and time, the relation between cause and effect, the relation between things and their qualities, the difference and the real relations between the physical and the mental, the character of numbers and numerical functions, the necessity, contingency, possibility or impossibility of conditions, and the like. We shall have to show later that philosophical sentences of such kinds only *seem* by their deceptive appearance to concern the objects mentioned, but that they really concern linguistic forms. For the present, however, we shall not enter into the consideration of such philosophical sentences, but will try to explain in general under what conditions a sentence has such a deceptive form.

For this purpose we will distinguish three kinds of sentences. About *syntactical sentences* I have just spoken; they concern the form of linguistics

tic expressions. With these are to be contrasted those sentences which concern not linguistic expressions but extra-linguistic objects; they may be called *real-object-sentences*. There is also a third, an intermediate kind of sentence. Sentences of this kind are, so to speak, amphibious, being like object-sentences as to their form, but like syntactical sentences as to their contents. They may be called *pseudo-object-sentences*.

1. <i>Real-object-sentences</i>	2. <i>Pseudo-object-sentences</i> Material mode of speech	3. <i>Syntactical sentences</i> Formal mode of speech
(Empirical Science)		(Philosophy)
1a. The moon is spherical.	1b. The moon is a thing. Q1 (<i>a</i>)	1c. The word "moon" is a thing-word. Q2 (" <i>a</i> ")
	2b. The first lecture treated of metaphysics	2c. The first lecture contained the word "metaphysics."
3a. Mr. A visited Africa.	3b. This book treats of Africa.	3c. This book contains the word "Africa."
4a. The evening-star and the earth are about equal in size.	4b. The evening-star and the morning-star are identical.	4c. The words "evening-star," and "morning-star" are synonymous.

Let us look at the examples tabulated above. (1a) "The moon is spherical" is a real-object-sentence which concerns the moon as its object. (1c) "The word 'moon' is a thing-word" is a syntactical sentence; its object is not the thing moon but the word "moon," a linguistic expression. Finally (1b) "The moon is a thing" is an example of a *pseudo-object-sentence*. This sentence has the same grammatical subject as the sentence (1a) and thus appears, like it, to concern the thing, moon, but there is a fundamental difference between the two sentences. The sentence (1a) is synthetic; it really asserts some quality of the moon. But, from the sentence (1b) we cannot learn any quality of the moon, neither as to its form, nor size, nor anything else. This sentence (1b) is analytic; we can ascertain its truth without observing the moon, by only considering to what syntactical kind the word "moon" belongs, namely that it is a thing-word. Thus we see that the sentence (1b) asserts the same as (1c), because always and only when a certain object is a thing is its designating word a thing-word.

We may call the quality of being a thing-designation a *parallel syntactical quality* to the quality of being a thing. The general definition will be: a syntactical quality *Q2* is called *parallel* to the quality *Q1* if it is the case that when, and only when, an object possesses the quality *Q1* does a designation of this object possess the quality *Q2*. And the criterion of a pseudo-object-sentence can now be stated as follows (if we regard only sentences of the

simplest form): such a sentence attributes to an object (say Q) a quality $Q1$ to which a parallel syntactical quality $Q2$ can be found. Such a sentence " $Q1(a)$ " can then be translated into the syntactical sentence " $Q2('a')$ " which attributes the quality $Q2$ to a designation of that object.

This brings out more clearly the difference between the sentences (1a) and (1b). While to the quality of being a thing there is a parallel syntactical quality, namely that of being a thing-designation, to the quality of being spherical there is no parallel syntactical quality—the designations of spherical things have no common characteristic syntactical quality. For instance, from the designation "my pencil" alone we are not able to decide whether it is a designation of a spherical thing or not; we should have to look at the designated object itself, namely my pencil. Therefore the sentence "The moon is spherical" is *not a pseudo-object-sentence*, but a *real-object-sentence*.

¶ 8. *The Material and the Formal Modes of Speech*

All sentences of empirical science, all sentences asserting facts, whether they are general or singular, are real-object-sentences. All sentences of logical analysis on the other hand, and—as we shall see in the next chapter—of philosophy, belong to the second or to the third kind. Thus in our further considerations, these two kinds of sentences are chiefly considered. They differ, as we have seen, not so much in their purport or contents as in their formulation. In the mode of speech applied in pseudo-object-sentences there are used words which designate objects or matter, while the words used in syntactical sentences obviously concern form. For this reason we shall call the pseudo-object-sentences also sentences of the *material mode of speech*, while we shall assign the syntactical sentences to the *formal mode of speech*.

The difference between these two modes of speech may be made clearer by a few examples. Take the sentence: "The first chapter treats of metaphysics." This sentence belongs to the material mode; the corresponding sentence of the formal mode is: "The first chapter contains the word 'metaphysics.'" To take a more striking example, suppose we have a geographical book about Africa and we make the statement: "This book treats of Africa." Then this sentence (3b) belongs to the material mode; the corresponding sentence of the formal mode is: "This book contains the word 'Africa'" (3c). The sentence (3b) is in its form analogous to the sentence "Mr. A visited Africa" (3a); but there is a principal difference between the two sentences. The sentence (3a) asserts something about Africa. The sentence (3b)—being analogous—*seems* to assert something about Africa, but really *does not*. It is not a quality of Africa to be treated of in that book, because one might know everything about Africa and nevertheless nothing about that book. It is only a quality of the word "Africa" to be contained in the book. On the other hand, it is really a quality of Africa to be visited by Mr.

A. Here we see the deceptive character of the material mode; the sentences of this mode seem to concern something which they in fact do not concern.

As an example of a somewhat different kind let us examine sentence (4b): "The evening-star and the morning-star are identical," or "... are the same thing." This sentence is in its form analogous to sentence (4a): "The evening-star and the earth are about equal in size"; but (4b) is in fact a pseudo-object-sentence which is to be translated into the following syntactical sentence (4c): "The words 'evening-star' and 'morning-star' are synonymous." The sentence (4a) asserts that there is a certain relation between two specified objects. The sentence (4b) *seems* to do the same, but it is obvious that it really does not. There cannot be *two* objects concerned here, because the two names designate only one object, namely a particular planet. But not even this object is concerned in the sentence (4b), for it is easy to see that it does not assert any quality whatever of that planet. It asserts only something about the two designations, namely that they designate the same thing, or expressed in syntactical terms, that they are synonymous. Here we find again that deceptive character of the material mode as to the subject-matter of its sentences. Most of the sentences of *philosophy* deceive us in this way, because, as we shall see, most of them are formulated in the material mode of speech.

III. SYNTAX AS THE METHOD OF PHILOSOPHY

¶ 1. *The Material Mode of Speech*

In the first chapter I tried to explain why I reject metaphysics and why I believe that the task of philosophy is logical analysis. The principal question that we have now to answer is: What is logical analysis? What kind of sentences are those that express the results of logical analysis? My answer—as I have already indicated—will be that they are syntactical sentences, sentences of logical syntax, and that philosophy is thus the application of the syntactical method.

In the last chapter we discovered that the number of sentences which belong to syntax is much greater than it seems to be at first glance, because many sentences which are really syntactical have a deceptive form, a form which makes us mistake them for object-sentences. Sentences of such a form we have called pseudo-object-sentences or sentences of the *material mode of speech*. We have seen how they can be translated into the formal mode of speech, that is, into sentences manifestly belonging to syntax. These con-

siderations will be of special importance for such sentences as express results of logical analysis, because those sentences are, as will be shown, very often, and perhaps for the most part, expressed in the material mode of speech. The use of this material mode often leads to confusion and idle philosophical controversies which can be settled by translating the theses of the controversy into the formal mode.

Let us begin with some examples already mentioned. The sentence, "The moon is a thing," belongs to the material mode. It can be translated into the following sentence of the formal mode: "The word 'moon' is a thing-designation." In general every sentence of the form "Such and such is a *thing*" belongs to the material mode. There are many other words which function in the same way as the word "thing," for instance the words "quality," "relation," "number," "event." Thus the statement, "Friendship is not a quality but a relation," is a sentence of the material mode which can be translated into the formal mode as: "The word 'friendship' is not a quality-designation but a relation-designation." By this translation it becomes clear that it is the *word* "friendship" which is here concerned, and not friendship itself, as is falsely suggested by the form of the original sentence. To take another example, this time arising out of the logical analysis of the notion of number, the sentence "7 is not a thing but a number," is merely the expression in the material mode of the formal sentence, "The sign '7' is not a thing-sign but a numerical sign."

Hence it is apparent that if we wish to avoid the dangerous material mode, we must avoid the word "thing" and use instead the parallel syntactical term "thing-designation"; analogously, instead of the word "number" we have to use the term "numerical designation," instead of "quality," "quality-designation," instead of "relation," "relation-designation," instead of "event," "event-designation," instead of "space," "spatial designation" or "spatial co-ordinates," instead of "time," "time-designation" or "time co-ordinates," and so on. It will be easily seen without further examples that in this way many results of logical analysis turn out in fact to be syntactical.

In the last chapter we showed that the sentence "This book treats of Africa," was a sentence of the material mode, capable of being translated into the formal statement, "This book contains the word 'Africa.'" Similarly, to the material mode belong all those sentences which assert that a certain sentence or treatise or theory or science *deals with* such and such objects, or *describes* or *asserts* such and such facts or states or events; or that a certain word or expression *designates* or *signifies* or *means* such and such an object.

Among such sentences dealing with the purport, meaning, or signification of something, especially important are those which express the result of the comparison of two theses or two theories or the like, and assert that both have the same purport or meaning, or that both express the same facts or states. For the translation of such sentences into the formal mode we make use of the syntactical term "equipollent" as defined above, and the

assertion becomes: "Those theses, theories, etc. are equipollent." Analogously, sentences such as "These expressions have the same signification" or "... designate the same object" are translated (according to our definition of the term "synonymous") into the form: "These expressions are *synonymous*."

By this method of translation into the formal mode we free logical analysis from all reference to the extra-linguistic objects themselves, and we are then concerned merely with the form of linguistic expressions. It is perhaps hardly necessary to emphasize the fact that this conclusion applies only to *logical analysis*, and that there is no question of eliminating reference to objects themselves from object-sciences. On the contrary, these sciences are really concerned with objects themselves, with things, not merely with thing-designations.

¶ 2. Modalities

Now let us consider some terms of a quite different kind, the so-called *modalities*, namely, possibility, impossibility, necessity and contingency. These ideas have at all times greatly exercised the minds of philosophers. Recently the logic of modalities has been treated with greater exactitude by means of the construction of axiomatic systems in which the modalities are given as principal concepts. But we find that the authors of these systems discuss certain questions (for instance that of the true meaning of possibility) for which there is given neither an unambiguous answer nor a method of resolution. In my opinion this is a symptom that in these systems the logical character of the modalities is not conceived with complete clarity.

Modality sentences are in fact veiled syntactical sentences, namely sentences of the material mode of speech. To what do we usually apply modalities, for instance, possibility or impossibility? We apply them to conditions, states, events, and such like—to take an example, "That *A* is older than *B*, and *B* is older than *A*, is an impossible state." This sentence can be translated from the material into the formal mode in the following way: "The sentence '*A* is older than *B*, and *B* is older than *A*' is contradictory." That the term "impossible" belongs in fact to the material mode, may be easily shown by the criterion previously explained: Impossibility is a quality to which there is a parallel syntactical quality, namely contradictoriness, because always and only when a state is impossible, is the sentence which describes this state contradictory, as, for instance, in the example given.

Sometimes, however, the idea of impossibility has the sense not of *logical*, but *physical* or *real* impossibility. In this latter case the parallel syntactical term is not "contradictory" but the corresponding general term, namely "contravalid." Take for instance the sentence, "The state of a particular solid iron ball floating on the water is physically impossible." The

translation is: "The sentence 'This solid iron ball is floating on the water' is contravalid." Here the sentence is in fact P-contravalid, that is incompatible with the system of physical laws.

The other modality-terms belong likewise to the material mode. As possibility is the opposite of impossibility, obviously the parallel syntactical term to "logically possible" is "non-contradictory," and the parallel syntactical term to "physically possible" is "non-contravalid." Analogously, we translate "logically necessary" into "analytic," and "physically necessary" into "valid." For instance, instead of saying in the material mode: "That an iron ball is heavier than a wooden ball of equal size, is physically necessary," we say in the formal mode: "The sentence 'An iron ball is heavier than a wooden ball of equal size' is valid." In this case the sentence is P-valid, that is, logically deducible from the system of physical laws. Finally we have the modality term "contingent" (in the sense of "neither necessary nor impossible"). We translate "logically contingent" into "synthetic," and "physically contingent" into "indeterminate."

MODALITY Terms	PARALLEL SYNTACTICAL TERMS	
	L-Terms	General Terms
logically or physically impossible	contradictory	contravalid
logically or physically possible	non-contradictory	non-contravalid
logically or physically necessary	analytic	valid
logically or physically contingent	synthetic	indeterminate

❏ 3. *Relativity in Regard to Language*

Now it may be asked why I repeatedly propose to translate sentences which are formulated in the material mode of speech into the formal mode. I do this for the purpose of showing that such sentences belong to the field of syntax. By the application of the material mode this character of the sentences is disguised; we are deceived—as we have been—as to their real subject-matter. But there are still greater disadvantages of the material mode. It involves the danger of getting into useless philosophical controversies.

To take a case in point, in the different systems of modern arithmetic dealt with logically, numbers are given different status. For instance in the system of Whitehead and Russell numbers are treated as classes of classes, while in the systems of Peano and of Hilbert they are taken as primitive objects. Suppose two philosophers get into a dispute, one of them asserting: "Numbers are classes of classes," and the other: "No, numbers are primitive objects, independent elements." They may philosophize without end about the question what numbers really are, but in this way they will never come to an agreement. Now let them both translate their theses into the formal

mode. Then the first philosopher makes the assertion: "Numerical expressions are class-expressions of the second order"; and the other says: "Numerical expressions are not class-expressions, but elementary expressions."

In this form, however, the two sentences are not yet quite complete. They are syntactical sentences concerning certain linguistic expressions. But a syntactical sentence must refer to one or several specific language-systems; it is incomplete unless it contains such a reference. If the language-system of Peano is called L_1 , and that of Russell L_2 , the two sentences may be completed as follows: "In L_1 numerical expressions are elementary expressions," and: "In L_2 numerical expressions are class expressions of the second order." Now these assertions are compatible with each other and both are true; the controversy has ceased to exist.

Very often futile philosophical controversies arise through such an incompleteness of theses. This incompleteness is concealed by the usual formulation in the material mode. When translated into the formal mode, the want of reference to language is noticed at once. Then by adding such a reference the theses are made complete, and thereby the controversy becomes clear and exact. Even then it will sometimes still be difficult to decide which side is right; but sometimes it is as simple as in the example just considered, and the dispute obviously vanishes. *The relativity of all philosophical theses in regard to language*, that is, the need of reference to one or several particular language-systems, is a very essential point to keep in mind. It is on account of the general use of the material mode of speech that this relativity is nearly always left unnoticed.

¶ 4. Pseudo-questions

In the example mentioned the theses are only incomplete; they can easily be translated into the formal mode and completed, and thus they become precise. In other cases, however, the use of the material mode leads to metaphysical pseudo-theses which cannot be so easily corrected. I do not mean that the sentences of the material mode are themselves necessarily pseudo-theses or without sense, but only that they often mislead us into stating other sentences or questions which are so. For instance, in the material mode we speak about numbers instead of numerical expressions. That is not in itself bad or incorrect, but it leads us into the temptation to raise questions as to the real essence of numbers, such as the philosophical questions whether numbers are real objects or ideal objects, whether they are extramental or intramental, whether they are objects-in-themselves or merely intentional objects of thinking, and the like. I do not know how such questions could be translated into the formal mode or into any other unambiguous and clear mode; and I doubt whether the philosophers themselves who are dealing with them are able to give us any such precise formu-

lation. Therefore it seems to me that these questions are metaphysical pseudo-questions.

If we use the formal mode of speech, we are not speaking about numbers, but about numerical expressions. We can then raise many questions concerning the syntactical character of the numerical expressions in a certain system or in different systems, but we do not arrive at pseudo-questions of the kind mentioned. Against these we are protected automatically, so to speak, by the use of the formal mode.

What are the practical consequences of these considerations as to the formulation of philosophical theses? There is no need to eliminate completely the material mode of speech. This mode is usual and perhaps sometimes suitable. But it must be handled with special caution. In all decisive points of discussion it is advisable to replace the material by the formal mode; and in using the formal mode, reference to the language-system must not be neglected. It is not necessary that the thesis should refer to a language-system already put forward; it may sometimes be desired to formulate a thesis on the basis of a so far unknown language-system, which is to be characterized by just this thesis. In such a case the thesis is not an assertion, but a proposal or project, in other words a part of the definition of the designed language-system.

If one partner in a philosophical discussion cannot or will not give a translation of his thesis into the formal mode, or if he will not state to which language-system his thesis refers, then the other will be well-advised to refuse the debate, because the thesis of his opponent is incomplete, and discussion would lead to nothing but empty wrangling.

One frequent cause of dispute amongst philosophers is the question what *things* really are. The representative of a Positivistic school asserts: "A thing is a complex of sense-data"; his Realistic adversary replies: "No, a thing is a complex of physical matter"; and an endless and futile argument is thus begun. Yet both are right after all; the controversy has arisen only on account of the unfortunate use of the material mode.

Let us translate the two theses into the formal mode. That of the Positivist becomes: "Every sentence containing a thing-designation is equipollent with a class of sentences which contain no thing-designations, but sense-data-designations," which is true; the transformation into sense-data-sentences has often been shown in epistemology. That of the Realist takes the form: "Every sentence containing a thing-designation is equipollent with a sentence containing no thing-designation, but space-time-co-ordinates and physical functions," which is obviously also true.

In this case we do not even need to refer to two different language-systems in order to make the two theses compatible with one another. They are right in relation to our general language. Each of them asserts the possibility of a certain transformation of thing-sentences. As both kinds of transformation are found feasible, there is no inconsistency. In the

original formulation in the material mode the theses *seemed* to be incompatible, because they *seemed* to concern the essence of things, both of them having the form: "A thing is such and such."

¶ 5. Epistemology

So far we have considered several examples of philosophical questions, and we have seen that we can translate these questions from the commonly used material mode of speech into the formal mode. By the possibility of this translation it is shown that they belong to syntax. Now the question arises whether the same consideration likewise applies to all other problems and theses of philosophy (where "philosophy," as explained before, is understood to include neither metaphysics nor psychology). It is my contention that it does. Let us glance at the principal parts of philosophy in order to examine this assertion.

Epistemology or theory of knowledge in its usual form contains both psychological and logical questions. The psychological questions here concern the procedure of knowledge, that is, the mental events by which we come to know something. If we surrender these questions to the psychologist for his empirical investigation, there remains the logical analysis of knowledge, or more precisely, the logical analysis of the examination and verification of assertions, because knowledge consists of positively verified assertions. Epistemological questions of this kind can certainly be expressed in the formal mode, because epistemological analysis, the question of the verification of a given sentence, has to refer—as we found in the first chapter—to those observation sentences which are deducible from the sentence in question. Thus the logical analysis of verification is the *syntactical* analysis of those transformation rules which determine the deduction of observation sentences. Hence *epistemology*—after elimination of its metaphysical and psychological elements—is a part of syntax.

¶ 6. Philosophy of Nature

It may seem, perhaps, more important to give our attention to some of the special divisions of philosophy, than to discuss the general questions of epistemology. What is called philosophy of nature, treated scientifically, is, in particular, attracting more and more interest at the present time. What is the subject-matter of this part of philosophy? Is its task the philosophical investigation of nature? The answer is, No; there can be no such thing as a philosophical investigation of nature, because whatever can be said about nature, that is about any events in time and space and about their connections, has to be said by the scientist on the basis of empirical

investigation. There remains nothing for the philosopher to say in this field. Metaphysicians do, indeed, venture to make a lot of statements about nature, but such metaphysics is, as we have seen, not theory, but rather poetry. The object of philosophy of nature is not nature, but the natural sciences, and its task is the logical analysis of science, in other words, the *syntactical* analysis of the language-system of science.

If in philosophy of nature we deal, for instance, with the structure of space and time, then we are occupied in fact with the syntactical analysis of the rules which determine the formation or transformation of space-and-time-expressions. The point may be clarified by considering the following thesis, which asserts one of the principal features of the space-time-structure: "Time is one-dimensional; space is three-dimensional." This sentence can be translated into the formal mode as follows: "A time-designation consists of one co-ordinate; a space-designation consists of three co-ordinates." In the same way the sentence "Time is infinite in both directions, namely, that of the past and that of the future," can be translated into the sentence: "Any real-number-expression, positive or negative, without limit, can be taken as a time-co-ordinate." The question: "Has space a Euclidean or a non-Euclidean structure?" becomes, in the formal mode: "Are the syntactical rules according to which from certain distances others can be calculated, of the Euclidean type or of one of the non-Euclidean types?"

Thus all questions about the structure of space and time are *syntactical* questions, that is, questions about the structure of the language, and especially the structure of the formation and transformation rules concerning space-and-time co-ordinates.

In addition to the problems of space and time, contemporary philosophy of nature is especially concerned with the problems of *causality*. These problems are syntactical problems concerning the syntactical structure of the system of physical laws, as for instance the question whether fundamental physical laws have the type of deterministic laws or that of merely statistical laws. This logical question is the core of the whole problem of Determinism, which is nearly always expressed in the material mode, and is in addition often mixed up with metaphysical pseudo-problems. Consequently its character as a syntactical problem has not been recognized.

The objection may perhaps be raised at this point that the form of physical laws depends upon the experimental results of physical investigations, and that it is not determined by a merely theoretical syntactical consideration. This assertion is quite right, but we must bear in mind the fact that the empirical results at which physicists arrive by way of their laboratory experiments by no means *dictate their choice* between the deterministic and the statistical form of laws. The form in which a law is to be stated has to be decided by an act of volition. This decision, it is true, depends upon the empirical results, but not logically, only practically. The results of the experiments show merely that one mode of formulation

would be more suitable than another, that is, more suitable with regard to the whole system of physics. However close the practical connection between the empirical results and the form of physical laws may be, the question concerning the form of these laws is in every case a syntactical question, that is, a question which has to be formulated in syntactical terms.

It is, to be sure, a syntactical question concerning a language-system which has not yet been stated, but is still a matter of discussion. And in this discussion about the future form of physical language and especially the form of fundamental physical laws, physicists as well as logicians have to take part. A satisfactory solution can only be found if both points of view, the empirical view of physics and the formal one of syntax, are taken into consideration. This applies not only to the special problem of causality and determinism, but generally to all problems of the philosophy of nature, to all questions of the logical analysis of empirical science. All such questions are *syntactical* problems, but in their treatment the results of *empirical* investigation have also to be taken into consideration.

¶ 7. What Physicalism Asserts

As there is no philosophy of nature, but only a philosophy of natural science, so there is no special philosophy of life or philosophy of the organic world, but only a philosophy of biology; no philosophy of mind, or philosophy of history or philosophy of society, but only a philosophy of historical and social sciences; always remembering that the philosophy of a science is the syntactical analysis of the language of that science.

The principal problems concerning such a language of a certain region of science are the questions as to the character of the terms contained therein, the character of the sentences, and above all the transformation or translation rules connecting that language with the other special languages, that is, with the other part-systems of the whole language of science. Of these languages the physical, or that in which we speak about physical things in every-day life or in physics, is of the greatest importance. In our discussions in the *Vienna Circle* we have arrived at the view that this physical language is the basic language of all science, that it is a universal language comprehending the contents of all other scientific languages. In other words, every sentence of any branch of scientific language is equipollent to some sentence of the physical language, and can therefore be translated into the physical language without changing its content. Dr. Neurath, who has greatly stimulated the considerations which lead to this thesis, has proposed to call it the thesis of physicalism.

For purposes of elucidation, let us take the following psychological statement: "At ten o'clock Mr. A was angry." The equipollent sentence of

the physical language is: "At ten o'clock Mr. A was in a certain bodily condition which is characterized by the acceleration of breathing and pulse, by the tension of certain muscles, by the tendency to certain violent behaviour, and so on." Let us express the quality of being angry by the symbol " Q_1 ," the above described physical quality of a body by " Q_2 ," and the time of ten o'clock by " t_1 ." Then we may write the two sentences symbolically in the following way:

(Psychological)	$Q_1(A, t_1)$	(S_1)
(Physical)	$Q_2(A, t_1)$	(S_2)

Now there is a scientific law, that is, a universal sentence belonging to the valid sentences of the scientific language-system, which says that whenever someone is angry his body is in the physical condition described, and *vice versa*. This is expressed in symbols by:

$$(x) (t) [Q_1(x, t) \equiv Q_2(x, t)]$$

(The sign of equivalence " \equiv " expresses the implication in both directions.) We have supposed that the quality Q_2 is chosen in such a way that this law is a valid scientific law, that is, either itself a transformation rule or deducible by the help of such rules. It need not be analytic; the only assumption is that it is valid. It may be synthetic, in which case it is P-valid. It is obvious that the sentence S_2 can be deduced from S_1 by the help of this law; and likewise S_1 from S_2 . Thus S_1 and S_2 are mutual consequences and hence equipollent. (It is to be remarked that they may be P-consequences and therefore P-equipollent; in the former explanations of physicalism this possibility is not taken sufficiently into account.)

The question may perhaps be raised whether we really can be sure that for any psychological quality Q_1 there is to be found a corresponding physical quality Q_2 of such a kind that the general equivalence can be stated as valid. If there were a quality Q_1 without such a corresponding quality Q_2 , then the psychological sentence " $Q_1(A, t_1)$ " could not be translated into the physical language, and the thesis of physicalism would be disproved.

My answer is that there cannot be such an untranslatable quality-sign or predicate in the psychological language. For if in this language there is a predicate " Q_1 " with a meaning, then the sentence " $Q_1(A, t_1)$ " must be empirically examinable; the psychologist must be able to recognize under suitable circumstances whether the person A is in the condition Q_1 or not. But this recognition depends upon the observable physical behaviour of A; hence there is a corresponding physical quality Q_2 , to which this behaviour is linked.

It will no doubt be objected that there is conceivable a psychological quality Q_1 which never has an effect upon behaviour; although feelings like anger or pleasure are for the most part expressed in an easily observable manner, there might be other mental states, such perhaps as thinking, which never had external consequences. Let us suppose that there is a kind of mental state without external consequences, and that the predicate " Q_1 " is

chosen to designate such a state in psychological language. By what means can the psychologist assert that a person A is in the state Q_1 , if there is not the least effect of this state to be observed? To this it will perhaps be answered that though it may be impossible for the psychologist to recognize such a state in another person, nevertheless the predicate " Q_1 " can be used by him in describing his own mental state, because for the recognition of that he does not need any external manifestation; he recognizes his state directly by introspection, and then uses the predicate " Q_1 " to express his findings, in the form, for instance, " Q_1 (I, now)." Granting that such an extreme case is possible, it does not affect the argument; for if events take the course supposed, then there still is an observable expression of the mental state, namely, the written or spoken assertion of the psychologist.

If, as under suitable conditions we may do, we believe him, that is accept his statement as a sufficient symptom of his really being in the state asserted, we may ourselves assert that he is now in that state, that is, we may assert the sentence " Q_1 (P, now)"—"P" being the name of the psychologist. But such a statement is only the expression in psychological language of the physical statement " Q_2 (P, now)" where Q_2 is the physical state of the body of P which we infer from our observation of the physical act by which P communicates the results of his introspection.

We may sum up the results of our investigation as follows. Firstly: If there is in the psychological language a predicate which is originally used only in describing one's *own* mental state, experienced by introspection, then the mere using of this predicate in speaking or writing *is* in fact a symptom of that state. Thus the psychological language can contain no predicate which designates a kind of state for which no observable symptom exists. Secondly: Even a predicate which is originally used only in regard to the speaker himself on the basis of his introspection, can subsequently be used also by one person in regard to another, on the basis of the linguistic utterances of the latter, even if no other than *linguistic* symptoms of the state designated by the predicate exist. So much may be said in reply to one of the strongest objections to physicalism.

¶ 8. What Physicalism Does Not Assert

Now let me say a little more about what the thesis of physicalism really asserts. For objections to this thesis give less trouble to its proponents than misunderstandings of its meaning. In order to make the thesis of physicalism as clearly comprehensible as possible, I might be tempted to formulate it as follows: To every mental state there is a corresponding physical state of the body, the latter connected with the former by universal laws; and therefore to every psychological sentence, say S_1 , there is a corresponding physical sentence, say S_2 , so that S_1 and S_2 are equipollent on account

of certain valid laws. But only the second half of this formulation, namely that half concerning the sentences S_1 and S_2 , is correct. The first half, referring to mental and physical states, belongs to the material mode of speech and may easily lead us to pseudo-questions.

For instance, if I speak about the mental state described by the sentence S_1 and the physical state described by S_2 , we may be tempted to raise the question whether they are really two states or only one and the same state regarded from two different points of view; and further, if they are two states, we may ask what relation there is between them to explain their simultaneous occurrence, and in particular whether this relation is the relation of causality or that of mere parallelism. Thus we shall find ourselves sliding into the midst of metaphysics—and that is sliding into the mud.

The questions mentioned belong, indeed, to one of the most famous philosophical problems, the so-called psycho-physical problem. Nevertheless they are pseudo-questions, they have no theoretical sense. All the questions that have sense in this connection can be formulated in the formal mode, that is by referring to sentences. It is characteristic of the above metaphysical questions that they can only be expressed in the material mode, by referring to states, not to sentences.

Among the formal questions which really have sense, perhaps the most important in this connection is whether or not to every psychological sentence S_1 there is a corresponding physical sentence S_2 which is equipollent with S_1 . The thesis of physicalism answers this question in the affirmative, but this position is, of course, always open to discussion if objections are brought against it. The question of physicalism is a scientific, and more precisely, a logical, a syntactical, question; it can only be settled by further consideration and debate. But whether, using the material mode, one should speak about two different states, a mental and a physical state, or about only one, is merely a question of a decision about the use of language, a question of taste, so to speak. It is by no means a question of fact, as metaphysicians in their controversies believe.

¶ 9. *The Unity of Science*

In close connection with physicalism is the thesis of the unity of science. If every sentence can be translated into the physical language, then this language is an all-embracing language, a universal language of science. The existence of one language-system in which every scientific term is contained, however, implies that all these terms are of logically related kinds, and that there cannot be a fundamental division between the terms of the different branches of science. Physical sciences, psychology, social sciences, may indeed for practical purposes be separated, because one scientist cannot

deal with all subjects; but they stand on the same basis, they constitute, in the last analysis, one uniform science.

Should anyone ask me whether that means that all objects in all branches of science are of the same kind, I might answer in the affirmative. But it is to be noted that both the question and the answer belong to the material mode, and I hope that no one who has read so far will be sufficiently unwary of its pitfalls to interpret my reply as an acceptance of the metaphysical thesis of monism. Physicalism and the thesis of the unity of language and of science have nothing to do with any such theses as monism, dualism, or pluralism. My reference to the uniformity of objects was only a concession to the usual mode of speech. To speak correctly, I must speak not about objects but about terms, and my statement becomes: the terms of all branches of science are logically uniform.

It was not my aim here to convince anyone of the truth of our theses of physicalism and the unity of science. I have only tried to make them clear, and especially to show that they are not in any way metaphysical theses concerning the essence of things, but only logical, which is to say syntactical theses. The explanation of physicalism was merely a special example of what I had previously said in general: namely, that all theses and questions of logical analysis and therefore all theses and questions of philosophy (in our sense of this word) belong to logical syntax. The method of logical syntax, that is, the analysis of the formal structure of language as a system of rules, is the only method of philosophy.

ADDENDA (1961)

The following remarks were added by Professor Carnap for this volume.

¶ 1. *Addendum to Section I, 4: Ethics.*

(This is a passage from a letter to Ray Lepley, May 1943; it was published in Lepley's book, *Verifiability of Value*, 1944, pp. 137 f., footnote 14.)

I should like to add a few remarks to my earlier formulations on ethics in *Philosophy and Logical Syntax* (1935), in order to clarify my position.

Moral value statements are interpreted by some philosophers as statements concerning the probable consequences of the acts in question. To call a kind of behavior good or bad is meant as saying that it is a suitable or unsuitable way to a certain aim. For instance, "killing is evil" may be meant as saying: "killing is not a suitable way to further a harmonious community life." On the basis of any interpretation of this kind, e.g., in terms of instrumental function or of human interests or the like, a value statement has obviously factual, cognitive content.

On the other hand, suppose someone refuses to give to his value statements any interpretation which makes them either analytic or subject to test by empirical evidence; perhaps he says explicitly, as some philosophers do, that a certain act is good not because of any consequences it may have but merely by its intrinsic nature. Value statements of this kind may be called absolute, in contrast to those mentioned before which are relative to certain aims. The critical judgment of logical empiricism is directed only against absolute value statements, such as occur frequently in works of European philosophers, not against the relative ones, which prevail in philosophical discussions in this country.

Since the word "meaning" is often used in a wider sense, I wish to emphasize that the kind of meaning which we deny for absolute value statements is only cognitive (theoretical, assertive) meaning. These statements certainly have expressive, especially emotive and motivative meaning; this fact is of great importance for their social effectiveness.

¶ 2. *Addendum to Section II, 6: Content.*

(1960.) As mentioned above, logical syntax was later supplemented by semantics. This made it possible to analyze the sense of meaning of expressions in language in a purely logical way, in contrast to the empirical investigation of meaning in psychology.

Truth and Confirmation

by **RUDOLF CARNAP**

The difference between the two concepts "true" and "confirmed" ("verified," "scientifically accepted") is important and yet frequently not sufficiently recognized. "True" in its customary meaning is a time-independent term; i.e., it is employed without a temporal specification. For example, one cannot say "such and such a statement is true today (was true yesterday; will be true tomorrow)" but only "the statement is true." "Confirmed,"

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however, is time-dependent. When we say "such and such a statement is confirmed to a high degree by observations" then we must add: "at such and such a time." This is the pragmatist concept of degree of confirmation. The semantical concept of the degree of confirmation of a statement *with respect to other statements* which formulate the evidence is again independent of the temporal aspect; in using this concept we are merely asserting an analytic or logical truth which is a sheer consequence of the definition of "degree of confirmation" (weight, strength of evidence) presupposed.

As is well known, the concept of truth, when used without restrictions (as in conversational language), leads to contradictions (the so-called antinomies). For this reason some logicians in recent times have been rather diffident in regard to this concept and have tried to avoid it. At times it was considered altogether impossible to establish an exact and consistent definition of truth (in its customary meaning); this has brought it about that the term "true" was used in the sense of the entirely different concept "confirmed." But this leads to considerable deviations from the common usage of language. Thus one would find it necessary to abandon, e.g., the principle of the excluded middle. This principle maintains for every statement that either it or its negation is true. But as to the vast majority of statements, neither they nor their negations are confirmed or scientifically accepted. Tarski, however, succeeded in establishing an unobjectionable definition of truth which explicates adequately the meaning of this word in common language (but of course is also bound to restrict its employment, as compared with common usage, in order to eliminate the contradictions). Hence the term "true" should properly no longer be used in the sense of "confirmed." We must not expect the definition of truth to furnish a criterion of confirmation such as is sought in epistemological analyses. On the basis of this definition the question regarding the criterion of truth can be given only a trivial answer, which consists in the statement itself. Thus, from the definition of truth we can conclude only, e.g.: The statement "Snow is white" is true if and only if snow is white. This conclusion is surely correct; which shows that the definition was adequately established. But the question of the criterion of confirmation is thereby left unanswered.

The neglect of the distinction between truth and knowledge of truth (verification, confirmation) is widespread and has led to serious confusions. Perhaps the following analysis will help towards a clarification.

Let us consider the following four sentences:

- (1) "The substance in this vessel is alcohol."
- (2) "The sentence 'the substance in this vessel is alcohol' is true."
- (3) "X knows (at the present moment) that the substance in this vessel is alcohol."

(4) "X knows that the sentence 'the substance in this vessel is alcohol' is true."

First a remark concerning the interpretation of the term "to know" as it occurs in (3) and (4), and generally as it is applied with respect to synthetic propositions concerning physical things. In which of the following two senses (a) and (b) should it be understood?

(a) It is meant in the sense of *perfect knowledge*, that is, knowledge which cannot possibly be refuted or even weakened by any future experience.

(b) It is meant in the sense of *imperfect knowledge*, that is, knowledge which has only a certain degree of assurance, not absolute certainty, and which therefore may possibly be refuted or weakened by future experience. (This is meant as a theoretical possibility; if the degree of assurance is sufficiently high we may, for all practical purposes, disregard the possibility of a future refutation.)

I am in agreement with practically everybody that sentences of the kind (3) should always be understood in the sense (b), not (a). For the following discussion I presuppose this interpretation of the sentences (3) and (4).

Now the decisive point for our whole problem is this: *the sentences* (1) and (2) are logically equivalent; in other words, they entail each other; they are merely different formulations for the same factual content; nobody may accept the one and reject the other; if used as communications, both sentences convey the same information though in different form. The difference in form is indeed important; the two sentences belong to two quite different parts of the language. (In my terminology, (1) belongs to the object part of the language, (2) to its meta-part, and, more specifically, to its semantical part.) This difference in form, however, does not prevent their logical equivalence. The fact that this equivalence has been overlooked by many authors (e.g., C. S. Peirce and John Dewey,¹ Reichenbach,² and Neurath³) seems to be the source of many misunderstandings in current discussions on the concept of truth. It must be admitted that any statement of the logical equivalence of two sentences in English can only be made with certain qualifications, because of the ambiguity of ordinary words, here the word "true." The equivalence holds certainly if "true" is understood in the sense of the semantical concept of truth.⁴ I believe with

1. See John Dewey, *Logic: The Theory of Inquiry*, 1938, p. 345, footnote 6, with quotations from Peirce.

2. Hans Reichenbach, *Experience and Prediction*, 1938, see chaps. 22, 35.

3. Otto Neurath, "Universal Jargon and Terminology," *Proceedings Aristotelian Society*, 1940-1941, pp. 127-148; see especially pp. 138 f.

4. For this point and the subsequent discussion compare Alfred Tarski, "The Semantic Conception of Truth, and the Foundations of Semantics," in *Philosophy and Phenomenological Research*, Vol. IV, 1944, where a number of common misunderstandings are cleared up. Compare also my *Introduction to Semantics*, 1942; see p. 26: "We use the term ['true'] here in such a sense that to assert *that a sentence is true means the same as to assert the sentence itself.*"

Tarski that this is also the sense in which the word "true" is mostly used both in everyday life and in science.⁵ However, this is a psychological or historical question, which we need not here examine further. In this discussion, at any rate, I use the word "true" in the semantical sense.

The sentences (1) and (3) obviously do not say the same. This leads to the important result, which is rather obvious but often overlooked, that *the sentences (2) and (3) have different contents*. It is now clear that a certain terminological possibility cannot be accepted. "If we constantly bear in mind that the acceptance of any proposition may be reversed," in other words, that we have always to use interpretation (b), not (a), "then we might instead call an accepted proposition a true proposition." This usage, however, would be quite misleading because it would blur the fundamental distinction between (2) and (3).

Felix Kaufmann⁶ comes to the conclusion that my conception, although in agreement with "the traditional view," "is incompatible with the principle of inquiry which rules out the invariable truth of synthetic propositions. It is impossible for an empirical procedure to confirm to any degree something which is excluded by a general (constitutive) principle of empirical procedure. *Knowledge of invariable truth of synthetic propositions (whether perfect or imperfect) is unobtainable, not because of limitations of human knowledge, but because the conception of such knowledge involves a contradiction in terms.*" This reasoning seems to me based on the wrong identification of truth with perfect knowledge, hence, in the example, the identification of (2) and (3) in interpretation (a). The principles of scientific procedure do indeed rule out perfect knowledge but not truth. They cannot rule out (2), because this says nothing else than sentence (1), which, I suppose, will be acknowledged by all of us as empirically meaningful. When Kaufmann declares that even imperfect knowledge of truth is unobtainable, then this means that even imperfect knowledge of (2) is unobtainable and hence that an event as described in (4), even in interpretation (b), cannot occur. However, as soon as the event (3) occurs [now always assuming interpretation (b)], which nobody regards as impossible, the event (4) thereby occurs too; for the sentences (3) and (4) describe merely in different words one and the same event, a certain state of knowledge of the person X.

Let us represent in a slightly different way the objection raised against the concept of truth, in order to examine the presupposition underlying its chief argument. The objection concerns the concept of truth in its semantical sense; Kaufmann uses here the term "invariable truth" because truth in this sense is independent of a person and state of knowledge, and hence of time. (Incidentally, the word "invariable" is not quite appropriate;

5. Arne Ness has expressed doubts in this respect; but he has admitted that in 90% of the cases examined by him the persons questioned reacted in the sense of the equivalence. See Tarski, with reference to Ness.

6. *Philosophy and Phenomenological Research*, Vol. II (1942), pp. 457-471; and especially Vol. IV (1944), pp. 267-284.

it would be more correct to say instead that truth is a "time-independent" or "non-temporal" concept. The volume of a body b may or may not change in the course of time; hence we may say that it is variable or that it is invariable. The sentence "the volume of b at the time t is v " is meaningful but without the phrase "at the time t " it would be incomplete. On the other hand, the formulation "the sentence S is true at the time t " is meaningless; when the phrase "at the time t " is omitted we obtain a complete statement. Therefore, to speak of change or non-change, of variability or invariability of truth, is not quite correct.) Now Kaufmann, Reichenbach,⁷ Neurath,⁸ and other authors are of the opinion that the semantical concept of truth, at least in its application to synthetic sentences concerning physical things, ought to be abandoned because it can never be decided with absolute certainty for any given sentence whether it is true or not. I agree that this can never be decided. But is the inference valid which leads from this result to the conclusion that the concept of truth is inadmissible? It seems that this inference presupposes the following major premise P : "A term (predicate) must be rejected if it is such that we can never decide with absolute certainty for any given instance whether or not the term applies." The argumentation by the authors would be valid if this principle P were presupposed, and I do not see how they reach the conclusion without this presupposition. However, I think that the authors do not actually believe in the principle P . In any case, it can easily be seen that the acceptance of P would lead to absurd consequences. For instance, we can never decide with absolute certainty whether a given substance is alcohol or not; thus, according to the principle P , the term "alcohol" would have to be rejected. And the same holds obviously for *every* term of the physical language. Thus I suppose that we all agree that instead of P the following weaker principle P^* must be used; this is indeed one of the principles of empiricism or of scientific inquiry: "A term (predicate) is a legitimate scientific term (has cognitive content, is empirically meaningful) if and only if a sentence applying the term to a given instance can possibly be confirmed to at least some degree." "Possibly" means here "if

7. Reichenbach, *op. cit.*, footnote 20, p. 188: "Thus there are left no propositions at all which can be absolutely verified. The predicate of truth-value of a proposition, therefore [!], is a mere fictive quality, its place is in an ideal world of science only, whereas actual science cannot make use of it. Actual science instead employs throughout the predicate of weight."

8. I agree with Neurath when he rejects the possibility of absolutely certain knowledge, for example, in his criticism of Schlick, who believed that the knowledge of certain basic sentences ("Konstatierungen") was absolutely certain. See Neurath, "Radikaler Physikalismus und 'Wirkliche Welt,'" *Erkenntnis*, Vol. IV (1934), pp. 346-362.

But I cannot agree with him when he proceeds from this view to the rejection of the concept of truth. In the paper mentioned earlier (in footnote 21) he says (pp. 138 f.): "In accordance with our traditional language we may say that some statements are accepted at a certain time by a certain person and not accepted by the same person at another time, but we cannot say some statements are true today but not tomorrow; 'true' and 'false' are 'absolute' terms, which we avoid."

certain specifiable observations occur"; "to some degree" is not meant as necessarily implying a numerical evaluation. P^* is a simplified formulation of the "requirement of confirmability"⁹ which, I think, is essentially in agreement with Reichenbach's "first principle of the probability theory of meaning,"¹⁰ both being liberalized versions of the older requirement of verifiability as stated by C. S. Peirce, Wittgenstein, and others.¹¹ Now, according to P^* , "alcohol" is a legitimate scientific term, because the sentence (1) can be confirmed to some degree if certain observations are made. But the same observations would confirm (2) to the same degree because it is logically equivalent to (1). Therefore, according to P^* , "true" is likewise a legitimate scientific term.

We shall now examine more closely the concept of confirmation. This will require that we describe the procedure of scientific testing and that we specify the conditions under which a statement, as a result of such testing is considered as more or less confirmed, i.e., scientifically accepted or rejected. The description of that procedure is not a matter of logic but is itself empirically-scientific (psychological and sociological). One might call it "methodological," especially if it is presented in the form of proposals and precepts. Only the essential features of the scientific procedure will here be schematically outlined; what matters here are not so much the details but rather a clear emphasis upon the distinction between the two most important operations of the procedure.

The statements of (empirical) science are such that they can never be definitively accepted or rejected. They can only be confirmed or disconfirmed to a certain degree. For the sake of simplicity we may distinguish two types of statements which are, however, not sharply separable (i.e., differing only by degree): the directly testable and the (only) indirectly testable statements. We shall speak of "directly testable statement" when circumstances are conceivable in which we confidently consider the statement so strongly confirmed or else disconfirmed on the basis of one or very few observations that we would either accept or reject it outright. Examples: "There is a key on my desk." Conditions for the test: I stand near my desk, sufficient illumination is provided, etc. Condition of acceptance: I see a key on my desk; condition of rejection: I don't see a key there. Indirect testing of a statement consists in directly testing other statements which stand in specifiable logical relations to the statement in question. These other statements may be called "test-sentences" for the given statement. Occasionally an indirectly testable statement may be confirmed by confirming statements from which it is deducible; this is the case, e.g., with existential statements. Scientific laws, however, have the form of uni-

9. Compare my "Testability and Meaning," *Philosophy of Science*, Vol. III (1936), pp. 419-471, and Vol. IV (1937), pp. 1-40; see Vol. IV, p. 34.

10. See Reichenbach, *op. cit.*, footnote 20, chap. 7; he formulated this principle first in 1936.

11. See the references in Reichenbach, *op. cit.*, footnote 20, p. 49.

versal statements. A universal statement (of simplest form) can be confirmed to ever higher degrees by confirming more and more statements derivable from the law and thereby accepting them (while none are rejected). There are important questions as to the logical relations between such statements which are to be tested and their respective test-sentences. We shall however not examine these any further but rather attend to the analysis of the confirmation of directly testable statements. Here we must distinguish mainly the following two operations:

1. *Confrontation of a statement with observation.* Observations are performed and a statement is formulated such that it may be recognized as confirmed on the basis of these observations. If, e.g., I see a key on my desk and I make the statement: "There is a key on my desk," I accept this statement because I acknowledge it as highly confirmed on the basis of my visual and, possibly, tactual observations. (The concept of observation is here understood in its widest sense; "I am hungry" or "I am angry" in this context are also taken as observation statements.¹² Ordinarily no definite rules are expressly stipulated as to how a statement may or must be formulated when certain observations have been made. Children learn the use of common language, and thereby the correct performance of the operation described, through practice, imitation, and usually without benefit of rules. These rules, however, could be specified. But if no foreign language or the introduction of new terms are involved, the rules are trivial. For example: "If one is hungry, the statement 'I am hungry' may be accepted"; or: "If one sees a key one may accept the statement 'there lies a key.'" In this context the definition of the concept of truth enters into the question of confirmation; the rules we mentioned originate from this definition.

2. *Confrontation of a statement with previously accepted statements.* A statement established on the basis of the first operation is held as (sufficiently strongly) confirmed as long as in the second operation no statements are found which were previously established by confirmation but are incompatible with the statement under consideration. In the event of such an incompatibility either the new statement or at least one of the previously accepted statements must be revoked. Certain methodological rules have to be stipulated; they tell us which of the two decisions is to be made in a given case.¹³ This sheds light upon the relation of the two operations to one another. The first one is more important. Without it there could be nothing like confirmation. The second one is an auxiliary operation. Its function is mostly negative or regulative: it serves in the elimination of incongruous elements from the system of statements in science.

12. It is a matter of convention as to whether these directly established statements (protocol statements) are to be taken as referring to observed things and processes ("there is on the table . . .") or to the act of perception ("I see . . ."). Cf. Carnap, "Ueber Protokollsätze," *Erkenntnis*, 3, 1933; also K. Popper, *Logik der Forschung*.

13. See Popper, *loc. cit.*

Closer attention to these two operations and their mutual relations will help to clarify a number of recently much discussed questions. There has been a good deal of dispute as to whether in the procedure of scientific testing *statements must be compared with facts* or as to whether such comparison be unnecessary, if not impossible. If "comparison of statement with fact" means the procedure which we called in the first operation then it must be admitted that this procedure is not only possible, but even indispensable for scientific testing. Yet it must be remarked that the formulation "comparison" is not quite appropriate here. Two objects can be compared in regard to a property which may characterize them in various ways (e.g., in regard to color, size, or number of parts, and so on). We therefore prefer to speak of "confrontation" rather than "comparison." Confrontation is understood to consist in finding out as to whether one object (the statement in this case) properly fits the other (the fact); i.e., as to whether the fact is such as it is described in the statement, or, to express it differently, as to whether the statement is true to fact. Furthermore, the formulation in terms of "comparison," in speaking of "facts" or "realities," easily tempts one into the absolutistic view according to which we are said to search for an absolute reality whose nature is assumed as fixed independently of the language chosen for its description. The answer to a question concerning reality however depends not only upon that "reality," or upon the facts but also upon the structure (and the set of concepts) of the language used for the description. In translating one language into another the factual content of an empirical statement cannot always be preserved unchanged. Such changes are inevitable if the structures of the two languages differ in essential points. For example: while many statements of modern physics are completely translatable into statements of classical physics, this is not so or only incompletely so with other statements. The latter situation arises when the statement in question contains concepts (like, e.g., "wave-function" or "quantization") which simply do not occur in classical physics; the essential point being that these concepts cannot be subsequently included since they presuppose a different form of language. This becomes still more obvious if we contemplate the possibility of a language with a discontinuous spatio-temporal order which might be adopted in a future physics. Then, obviously, some statement of classical physics could not be translated into the new language, and others only incompletely. (This means not only that previously accepted statements would have to be rejected; but also that to certain statements—regardless of whether they were held true or false—there is no corresponding statement at all in the new language.)

The scruples here advanced regarding the assertion that statements are to be compared with facts (or reality) were directed not so much against its content but rather against its form. The assertion is not false—if only it is interpreted in the manner indicated—but formulated in a potentially misleading fashion. Hence, one must not, in repudiating the assertion, re-

place it by its denial: "Statements cannot be compared with facts (or with reality)"; for this negative formulation is as much open to objection as the original affirmative one. In repudiating the formulation one must take care not to reject the procedure which was presumably intended, viz., the confrontation with observation. Nor must the significance and indispensability of such confrontation be overshadowed by exclusive attention to the second operation. (Besides, the phrase "comparison of statements with each other," instead of "confrontation," seems open to the same objections.) He who really repudiates the first operation—I do not think that anyone in scientifically oriented circles does—could not be considered an empiricist.

The result of these considerations may now be briefly summarized:

1. The question of the definition of *truth* must be clearly distinguished from the question of a criterion of *confirmation*.
2. In connection with confirmation two different operations have to be performed: the formulation of an observation and the confrontation of statements with each other; especially, we must not lose sight of the first operation.

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Meaning and Verification

by MORITZ SCHLICK

I

Philosophical questions, as compared with ordinary scientific problems, are always strangely paradoxical. But it seems to be an especially strange

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paradox that the question concerning the meaning of a proposition should constitute a serious philosophical difficulty. For is it not the very nature and purpose of every proposition to express its own meaning? In fact, when we are confronted with a proposition (in a language familiar to us) we usually know its meaning immediately. If we do not, we can have it explained to us, but the explanation will consist of a new proposition; and if the new one is capable of expressing the meaning, why should not the original one be capable of it? So that a snippy person when asked what he meant by a certain statement might be perfectly justified in saying, "I meant exactly what I said!"

It is logically legitimate and actually the normal way in ordinary life and even in science to answer a question concerning the meaning of a proposition by simply repeating it either more distinctly or in slightly different words. Under what circumstances, then, can there be any sense in asking for the meaning of a statement which is well before our eyes or ears?

Evidently the only possibility is that we have not *understood* it. And in this case what is actually before our eyes or ears is nothing but a series of words which we are unable to handle; we do not know how to use it, how to "apply it to reality." Such a series of words is for us simply a complex of signs "without meaning," a mere sequel of sounds or a mere row of marks on paper, and we have no right to call it "a proposition" at all; we may perhaps speak of it as "a sentence."

If we adopt this terminology we can now easily get rid of our paradox by saying that we cannot inquire after the meaning of a proposition, but can ask about the meaning of a sentence, and that this amounts to asking, "What proposition does the sentence stand for?" And this question is answered either by a proposition in a language with which we are already perfectly familiar; or by indicating the logical rules which will make a proposition out of the sentence, i.e., will tell us exactly in what circumstances the sentence is to be *used*. These two methods do not actually differ in principle; both of them give meaning to the sentence (transform it into a proposition) by locating it, as it were, within the system of a definite language; the first method making use of a language which is already in our possession, the second one building it up for us. The first method represents the simplest kind of ordinary "translation"; the second one affords a deeper insight into the nature of meaning, and will have to be used in order to overcome philosophical difficulties connected with the understanding of sentences.

The source of these difficulties is to be found in the fact that very often we do not know how to handle our own words; we speak or write without having first agreed upon a definite logical grammar which will constitute the signification of our terms. We commit the mistake of thinking that we know the meaning of a sentence (i.e., understand it as a proposi-

tion) if we are familiar with all the words occurring in it. But this is not sufficient. It will not lead to confusion or error as long as we remain in the domain of everyday life by which our words have been formed and to which they are adapted, but it will become fatal the moment we try to think about abstract problems by means of the same terms without carefully fixing their signification for the new purpose. For every word has a definite signification only within a definite context into which it has been fitted; in any other context it will have no meaning unless we provide new rules for the use of the word in the new case, and this may be done, at least in principle, quite arbitrarily.

Let us consider an example. If a friend should say to me, "Take me to a country where the sky is three times as blue as in England!" I should not know how to fulfill his wish; his phrase would appear nonsensical to me, because the word "blue" is used in a way which is not provided for by the rules of our language. The combination of a numeral and the name of a color does not occur in it; therefore my friend's sentence has no meaning, although its exterior linguistic form is that of a command or a wish. But he can, of course, give it a meaning. If I ask him, "What do you mean by 'three times as blue'?" he can arbitrarily indicate certain definite physical circumstances concerning the serenity of the sky which he wants his phrase to be the description of. And then, perhaps, I shall be able to follow his directions; his wish will have become meaningful for me.

Thus, whenever we ask about a sentence, "What does it mean?" what we expect is instruction as to the circumstances in which the sentence is to be used; we want a description of the conditions under which the sentence will form a *true* proposition, and of those which will make it *false*. The meaning of a word or a combination of words is, in this way, determined by a set of rules which regulate their use and which, following Wittgenstein, we may call the rules of their *grammar*, taking this word in its widest sense.

(If the preceding remarks about meaning are as correct as I am convinced they are, this will, to a large measure, be due to conversations with Wittgenstein which have greatly influenced my own views about these matters. I can hardly exaggerate my indebtedness to this philosopher. I do not wish to impute to him any responsibility for the contents of this article, but I have reason to hope that he will agree with the main substance of it.)

Stating the meaning of a sentence amounts to stating the rules according to which the sentence is to be used, and this is the same as stating the way in which it can be verified (or falsified). The meaning of a proposition is the method of its verification.

The "grammatical" rules will partly consist of ordinary definitions, i.e., explanations of words by means of other words, partly of what are called "ostensive" definitions, i.e., explanations by means of a procedure which

puts the words to actual use. The simplest form of an ostensive definition is a pointing gesture combined with the pronouncing of the word, as when we teach a child the signification of the sound "blue" by showing a blue object. But in most cases the ostensive definition is of a more complicated form; we cannot point to an object corresponding to words like "because," "immediate," "chance," "again," etc. In these cases we require the presence of certain complex situations, and the meaning of the words is defined by the way we use them in these different situations.

It is clear that in order to understand a verbal definition we must know the signification of the explaining words beforehand, and that the only explanation which can work without any previous knowledge is the ostensive definition. We conclude that there is no way of understanding any meaning without ultimate reference to ostensive definitions, and this means, in an obvious sense, reference to "experience" or "possibility of verification."

This is the situation, and nothing seems to me simpler or less questionable. It is this situation and nothing else that we describe when we affirm that the meaning of a proposition can be given only by giving the rules of its verification in experience. (The addition, "in experience," is really superfluous, as no other kind of verification has been defined.)

This view has been called the "experimental theory of meaning"; but it certainly is no theory at all, for the term "theory" is used for a set of hypotheses about a certain subject-matter, and there are no hypotheses involved in our view, which proposes to be nothing but a simple statement of the way in which meaning is *actually* assigned to propositions, both in everyday life and in science. There has never been any other way, and it would be a grave error to suppose that we believe we have discovered a new conception of meaning which is contrary to common opinion and which we want to introduce into philosophy. On the contrary, our conception is not only entirely in agreement with, but even derived from, common sense and scientific procedure. Although our criterion of meaning has always been employed in practice, it has very rarely been formulated in the past, and this is perhaps the only excuse for the attempts of so many philosophers to deny its feasibility.

The most famous case of an explicit formulation of our criterion is Einstein's answer to the question, "What do we mean when we speak of two events at distant places happening simultaneously?" This answer consisted in a description of an experimental method by which the simultaneity of such events was actually ascertained. Einstein's philosophical opponents maintained—and some of them still maintain—that they knew the meaning of the above question independently of any method of verification. All I am trying to do is to stick consistently to Einstein's position and to admit no exceptions from it. (Professor Bridgman's book on *The Logic of Modern Physics* is an admirable attempt to carry out this program for all concepts

of physics.) I am not writing for those who think that Einstein's philosophical opponents were right.

II

Professor C. I. Lewis, in a remarkable address on "Experience and Meaning" (published in *The Philosophical Review*, March 1934), has justly stated that the view developed above (he speaks of it as the "empirical-meaning requirement") forms the basis of the whole philosophy of what has been called the "logical positivism of the Viennese Circle." He criticizes this basis as inadequate chiefly on the ground that its acceptance would impose certain limitations upon "significant philosophic discussion" which, at some points, would make such discussion altogether impossible and, at other points, restrict it to an intolerable extent.

Feeling responsible as I do for certain features of the Viennese philosophy (which I should prefer to call Consistent Empiricism), and being of the opinion that it really does not impose any restrictions upon significant philosophizing at all, I shall try to examine Professor Lewis' chief arguments and point out why I think that they do not endanger our position—at least as far as I can answer for it myself. All of my own arguments will be derived from the statements made in section I.

Professor Lewis describes the empirical-meaning requirement as demanding "that any concept put forward or any proposition asserted shall have a definite denotation; that it shall be intelligible not only verbally and logically but in the further sense that one can specify those empirical items which would determine the applicability of the concept or constitute the verification of the proposition" (*loc. cit.*, 125). Here it seems to me that there is no justification for the words "but in the *further* sense . . .," i.e., for the distinction of two (or three?) senses of intelligibility. The remarks in section I show that, according to our opinion, "verbal and logical" understanding *consists in* knowing how the proposition in question could be verified. For, unless we mean by "verbal understanding" that we know how the words are actually used, the term could hardly mean anything but a shadowy feeling of being acquainted with the words, and in a philosophical discussion it does not seem advisable to call such a feeling "understanding." Similarly, I should not advise that we speak of a sentence as being "logically intelligible" when we just feel convinced that its exterior form is that of a proper proposition (if, e.g., it has the form, substantive—copula—adjective, and therefore appears to predicate a property of a thing). For it seems to me that by such a phrase we want to say much *more*, namely, that we are completely aware of the whole grammar of the sentence, i.e., that we know exactly the circumstances to which it is fitted. Thus knowledge of how a proposition is verified is not anything over and

above its verbal and logical understanding, but is identical with it. It seems to me, therefore, that when we demand that a proposition be verifiable we are not adding a new requirement but are simply formulating the conditions which have actually always been acknowledged as necessary for meaning and intelligibility.

The mere statement that no sentence has meaning unless we are able to indicate a way of testing its truth or falsity is not very useful if we do not explain very carefully the signification of the phrases "method of testing" and "verifiability." Professor Lewis is quite right when he asks for such an explanation. He himself suggests some ways in which it might be given, and I am glad to say that his suggestions appear to me to be in perfect agreement with my own views and those of my philosophical friends. It will be easy to show that there is no serious divergence between the point of view of the pragmatist as Professor Lewis conceives it and that of the Viennese Empiricist. And if in some special questions they arrive at different conclusions, it may be hoped that a careful examination will bridge the difference.

How do we define verifiability?

In the first place I should like to point out that when we say that "a proposition has meaning only if it is verifiable" we are not saying ". . . if it is *verified*." This simple remark does away with one of the chief objections; the "here and now predicament," as Professor Lewis calls it, does not exist any more. We fall into the snares of this predicament only if we regard verification itself as the criterion of meaning, instead of "possibility of verification" (= verifiability); this would indeed lead to a "reduction to absurdity of meaning." Obviously the predicament arises through some fallacy by which these two notions are confounded. I do not know if Russell's statement, "Empirical knowledge is confined to what we actually observe" (quoted by Professor Lewis, *loc. cit.*, 130), must be interpreted as containing this fallacy, but it would certainly be worth while to discover its genesis.

Let us consider the following argument which Professor Lewis discusses (131), but which he does not want to impute to anyone:

Suppose it maintained that no issue is meaningful unless it can be put to the test of decisive verification. And no verification can take place except in the immediately present experience of the subject. Then nothing can be meant except what is actually present in the experience in which that meaning is entertained.

This argument has the form of a conclusion drawn from two premisses. Let us for the moment assume the second premiss to be meaningful and true. You will observe that even then the conclusion does *not* follow. For the first premiss assures us that the issue has meaning if it *can* be verified; the verification does not have to take place, and therefore it is quite irrelevant whether it can take place in the future or in the present only. Apart

from this, the second premiss is, of course, nonsensical; for what fact could possibly be described by the sentence "verification can take place only in present experience"? Is not verifying an act or process like hearing or feeling bored? Might we not just as well say that I can hear or feel bored only in the present moment? And what could I mean by this? The particular nonsense involved in such phrases will become clearer when we speak of the "egocentric predicament" later on; at present we are content to know that our empirical-meaning postulate has nothing whatever to do with the now-predicament. "Verifiable" does not even mean "verifiable here now"; much less does it mean "being verified now."

Perhaps it will be thought that the only way of making sure of the verifiability of a proposition would consist in its actual verification. But we shall soon see that this is not the case.

There seems to be a great temptation to connect meaning and the "immediately given" in the wrong way; and some of the Viennese positivists may have yielded to this temptation, thereby getting dangerously near to the fallacy we have just been describing. Parts of Carnap's *Der Logische Aufbau der Welt*, for instance, might be interpreted as implying that a proposition about future events did not really refer to the future at all but asserted only the present existence of certain expectations (and, similarly, speaking about the past would really mean speaking about present memories). But it is certain that the author of that book does not hold such a view now, and that it cannot be regarded as a teaching of the new positivism. On the contrary, we have pointed out from the beginning that our definition of meaning does not imply such absurd consequences, and when someone asked, "But how can you verify a proposition about a future event?" we replied, "Why, for instance, by waiting for it to happen! 'Waiting' is a perfectly legitimate method of verification."

Thus I think that everybody—including the Consistent Empiricist—agrees that it would be nonsense to say, "We can mean nothing but the immediately given." If in this sentence we replace the word "mean" by the word "know" we arrive at a statement similar to Bertrand Russell's mentioned above. The temptation to formulate phrases of this sort arises, I believe, from a certain ambiguity of the verb "to know" which is the source of many metaphysical troubles and to which, therefore, I have often had to call attention on other occasions (see, e.g., *Allgemeine Erkenntnislehre*, 2nd ed., 1925, 12): In the first place the word may stand simply for "being aware of a datum," i.e., for the mere presence of a feeling, a color, a sound, etc.; and if the word "knowledge" is taken in this sense, the assertion "Empirical knowledge is confined to what we actually observe" does not say anything at all, but is a mere tautology. (This case, I think, would correspond to what Professor Lewis calls "identity-theories" of the "knowledge-relation." Such theories, resting on a tautology of this kind, would be empty verbiage without significance.)

In the second place the word "knowledge" may be used in one of the significant meanings which it has in science and ordinary life; and in this case Russell's assertion would obviously (as Professor Lewis remarked) be false. Russell himself, as is well known, distinguishes between "knowledge by acquaintance" and "knowledge by description," but perhaps it should be noted that this distinction does not entirely coincide with the one we have been insisting upon just now.

III

Verifiability means possibility of verification. Professor Lewis justly remarks that to "omit all examination of the wide range of significance which could attach to 'possible verification,' would be to leave the whole conception rather obscure" (*loc. cit.*, 137). For our purpose it suffices to distinguish between two of the many ways in which the word "possibility" is used. We shall call them "empirical possibility" and "logical possibility." Professor Lewis describes two meanings of "verifiability" which correspond exactly to this difference; he is fully aware of it, and there is hardly anything left for me to do but carefully to work out the distinction and show its bearing upon our issue.

I propose to call "empirically possible" anything that does not contradict the laws of nature. This is, I think, the largest sense in which we may speak of empirical possibility; we do not restrict the term to happenings which are not only in accordance with the laws of nature but also with the actual state of the universe (where "actual" might refer to the present moment of our own lives, or to the condition of human beings on this planet, and so forth). If we chose the latter definition (which seems to have been in Professor Lewis' mind when he spoke of "possible experience as conditioned by the actual," *loc. cit.*, 141) we should not get the sharp boundaries we need for our present purpose. So "empirical possibility" is to mean "compatibility with natural laws."

Now, since we cannot boast of a complete and sure knowledge of nature's laws, it is evident that we can never assert with certainty the empirical possibility of any fact, and here we may be permitted to speak of degrees of possibility. Is it possible for me to lift this book? Surely!—This table? I think so!—This billiard table? I don't think so!—This automobile? Certainly not.—It is clear that in these cases the answer is given by *experience*, as the result of experiments performed in the past. Any judgment about empirical possibility is based on experience and will often be rather uncertain; there will be no sharp boundary between possibility and impossibility.

Is the possibility of verification which we insist upon of this empirical

sort? In that case there would be different degrees of verifiability, the question of meaning would be a matter of more or less, not a matter of yes or no. In many disputes concerning our issue it is the empirical possibility of verification which is discussed; the various examples of verifiability given by Professor Lewis, e.g., are instances of different empirical circumstances in which the verification is carried out or prevented from being carried out. Many of those who refuse to accept our criterion of meaning seem to imagine that the procedure of its application in a special case is somewhat like this: A proposition is presented to us ready made, and in order to discover its meaning we have to try various methods of verifying or falsifying it, and if one of these methods works we have found the meaning of the proposition; but if not, we say it has no meaning. If we really had to proceed in this way, it is clear that the determination of meaning would be entirely a matter of experience, and that in many cases no sharp and ultimate decision could be obtained. How could we ever know that we had tried long enough, if none of our methods were successful? Might not future efforts disclose a meaning which we were unable to find before?

This whole conception is, of course, entirely erroneous. It speaks of meaning as if it were a kind of entity inherent in a sentence and hidden in it like a nut in its shell, so that the philosopher would have to crack the shell or sentence in order to reveal the nut or meaning. We know from our considerations in section I that a proposition cannot be given "ready made"; that meaning does not inhere in a sentence where it might be discovered, but that it must be bestowed upon it. And this is done by applying to the sentence the rules of the logical grammar of our language, as explained in section I. These rules are not facts of nature which could be "discovered," but they are prescriptions stipulated by acts of definition. And these definitions have to be known to those who pronounce the sentence in question and to those who hear or read it. Otherwise they are not confronted with any proposition at all, and there is nothing they could try to verify, because you can't verify or falsify a mere row of words. You cannot even start verifying before you know the meaning, i.e., before you have established the possibility of verification.

In other words, the possibility of verification which is relevant to meaning cannot be of the empirical sort; it cannot be established *post festum*. You have to be sure of it before you can consider the empirical circumstances and investigate whether or no or under what conditions they will permit of verification. The empirical circumstances are all-important when you want to know if a proposition is *true* (which is the concern of the scientist), but they can have no influence on the *meaning* of the proposition (which is the concern of the philosopher). Professor Lewis has seen and expressed this very clearly (*loc. cit.*, 142, first six lines), and our Vienna positivism, as far as I can answer for it, is in complete agreement with him on this point. It

must be emphasized that when we speak of verifiability we mean *logical* possibility of verification, and nothing but this.

I call a fact or a process "logically possible" if it can be *described*, i.e., if the sentence which is supposed to describe it obeys the rules of grammar we have stipulated for our language. (I am expressing myself rather incorrectly. A fact which could not be described would, of course, not be any fact at all; *any* fact is logically possible. But I think my meaning will be understood.) Take some examples. The sentences, "My friend died the day after tomorrow"; "The lady wore a dark red dress which was bright green"; "The campanile is 100 feet and 150 feet high"; "The child was naked, but wore a long white nightgown," obviously violate the rules which, in ordinary English, govern the use of the words occurring in the sentences. They do not describe any facts at all; they are meaningless, because they represent *logical* impossibilities.

It is of the greatest importance (not only for our present issue but for philosophical problems in general) to see that whenever we speak of logical impossibility we are referring to a discrepancy between the definitions of our terms and the way in which we use them. We must avoid the severe mistake committed by some of the former Empiricists like Mill and Spencer, who regarded logical principles (e.g., the Law of Contradiction) as laws of nature governing the psychological process of thinking. The nonsensical statements alluded to above do not correspond to thoughts which, by a sort of psychological experiment, we find ourselves unable to think; they do not correspond to any thoughts at all. When we hear the words, "A tower which is both 100 feet and 150 feet high," the image of two towers of different heights may be in our mind, and we may find it psychologically (empirically) impossible to combine the two pictures into one image, but it is not this fact which is denoted by the words "logical impossibility." The height of a tower cannot be 100 feet and 150 feet at the same time; the child cannot be naked and dressed at the same time—not because we are unable to imagine it, but because our definitions of "height," of the numerals, of the terms "naked" and "dressed" are not compatible with the particular combinations of those words in our examples. "They are not compatible with such combinations" means that the rules of our language have not provided any use for such combinations; they do not describe any fact. We could change these rules, of course, and thereby arrange a meaning for the terms "both red and green," "both naked and dressed"; but if we decide to stick to the ordinary definitions (which reveal themselves in the way we actually use our words) we have decided to regard those combined terms as meaningless, i.e., not to use them as the description of *any* fact. Whatever fact we may or may not imagine, if the word "naked" (or "red") occurs in its description we have decided that the word "dressed" (or "green") cannot

be put in its place in the same description. If we do not follow this rule it means that we want to introduce a new definition of the words, or that we don't mind using words without meaning and like to indulge in nonsense. (I am far from condemning this attitude under all circumstances; on certain occasions—as in *Alice in Wonderland*—it may be the only sensible attitude and far more delightful than any treatise on logic. But in such a treatise we have a right to expect a different attitude.)

The result of our considerations is this: Verifiability, which is the sufficient and necessary condition of meaning, is a possibility of the logical order; it is created by constructing the sentence in accordance with the rules by which its terms are defined. The only case in which verification is (logically) impossible is the case where you have *made* it impossible by not setting any rules for its verification. Grammatical rules are not found anywhere in nature, but are made by man and are, in principle, arbitrary; so you cannot give meaning to a sentence by *discovering* a method of verifying it, but only by *stipulating* how it *shall* be done. Thus logical possibility or impossibility of verification is always *self-imposed*. If we utter a sentence without meaning it is always *our own fault*.

The tremendous philosophic importance of this last remark will be realized when we consider that what we said about the meaning of *assertions* applies also to the meaning of *questions*. There are, of course, many questions which can never be answered by human beings. But the impossibility of finding the answer may be of two different kinds. If it is merely empirical in the sense defined, if it is due to the chance circumstances to which our human existence is confined, there may be reason to lament our fate and the weakness of our physical and mental powers, but the problem could never be said to be absolutely insoluble, and there would always be some hope, at least for future generations. For the empirical circumstances may alter, human facilities may develop, and even the laws of nature may change (perhaps even suddenly and in such a way that the universe would be thrown open to much more extended investigation). A problem of this kind might be called practically unanswerable or technically unanswerable, and might cause the scientist great trouble, but the philosopher, who is concerned with general principles only, would not feel terribly excited about it.

But what about those questions for which it is *logically* impossible to find an answer? Such problems would remain insoluble under all imaginable circumstances; they would confront us with a definite hopeless *Ignorabimus*; and it is of the greatest importance for the philosopher to know whether there are any such issues. Now it is easy to see from what has been said before that this calamity could happen only if the question itself had no meaning. It would not be a genuine question at all, but a mere row of words with a question mark at the end. We must say that a question is meaningful, if we can understand it, i.e., if we are able to decide for any given proposition whether, if true, it would be an answer to our question. And if

this is so, the actual decision could only be prevented by empirical circumstances, which means that it would not be *logically* impossible. Hence no meaningful problem can be insoluble in *principle*. If in any case we find an answer to be logically impossible we know that we really have not been asking anything, that what sounded like a question was actually a non-sensical combination of words. A genuine question is one for which an answer is logically possible. This is one of the most characteristic results of our empiricism. It means that in principle there are no limits to our knowledge. The boundaries which must be acknowledged are of an empirical nature and, therefore, never ultimate; they can be pushed back further and further; there is no unfathomable mystery in the world.

The dividing line between logical possibility and impossibility of verification is absolutely sharp and distinct; there is no gradual transition between meaning and nonsense. For either you have given the grammatical rules for verification, or you have not; *tertium non datur*.

Empirical possibility is determined by the laws of nature, but meaning and verifiability are entirely independent of them. Everything that I can describe or define is logically possible—and definitions are in no way bound up with natural laws. The proposition "Rivers flow uphill" is meaningful, but happens to be false because the fact it describes is *physically* impossible. It will not deprive a proposition of its meaning if the conditions which I stipulate for its verification are incompatible with the laws of nature; I may prescribe conditions, for instance, which could be fulfilled only if the velocity of light were greater than it actually is, or if the Law of Conservation of Energy did not hold, and so forth.

An opponent of our view might find a dangerous paradox or even a contradiction in the preceding explanations, because on the one hand we insisted so strongly on what has been called the "*empirical-meaning* requirement," and on the other hand we assert most emphatically that meaning and verifiability do not depend on any empirical conditions whatever, but are determined by purely logical possibilities. The opponent will be object; if meaning is a matter of experience, how can it be a matter of definition and logic?

In reality there is no contradiction or difficulty. The word "experience" is ambiguous. Firstly, it may be a name for any so-called "immediate data"—which is a comparatively modern use of the word—and secondly we can use it in the sense in which we speak, e.g., of an "experienced traveler," meaning a man who has not only seen a great deal but also knows how to profit from it for his actions. It is in this second sense (by the way, the sense the word has in Hume's and Kant's philosophy) that verifiability must be declared to be independent of experience. The possibility of verification does not rest on any "experiential truth," on a law of nature or any other

true general proposition, but is determined solely by our definitions, by the rules which have been fixed for our language, or which we can fix arbitrarily at any moment. All of these rules ultimately point to ostensive definitions, as we have explained, and through them verifiability is linked to *experience* in the *first* sense of the word. No rule of expression presupposes any law or regularity in the world (which is the condition of "experience" as Hume and Kant use the word), but it does presuppose data and situations, to which names can be attached. The rules of language are rules of the application of language; so there must be something to which it can be applied. Expressibility and verifiability are one and the same thing. There is no antagonism between logic and experience. Not only can the logician be an empiricist at the same time; he *must* be one if he wants to understand what he himself is doing.

IV

Let us glance at some examples in order to illustrate the consequences of our attitude in regard to certain issues of traditional philosophy. Take the famous case of the reality of the other side of the moon (which is also one of Professor Lewis' examples). None of us, I think, would be willing to accept a view according to which it would be nonsense to speak of the averted face of our satellite. Can there be the slightest doubt that, according to our explanations, the conditions of meaning are amply satisfied in this case?

I think there can be no doubt. For the question, "What is the other side of the moon like?" could be answered, for instance, by a description of what would be seen or touched by a person located somewhere behind the moon. The question whether it be physically possible for a human being—or indeed any other living being—to travel around the moon does not even have to be raised here; it is entirely irrelevant. Even if it could be shown that a journey to another celestial body were absolutely incompatible with the known laws of nature, a proposition about the other side of the moon would still be meaningful. Since our sentence speaks of certain places in space as being filled with matter (for that is what the words "side of the moon" stand for), it will have meaning if we indicate under what circumstances a proposition of the form, "this place is filled with matter," shall be called true or false. The concept "physical substance at a certain place" is defined by our language in physics and geometry. Geometry itself is the grammar of our propositions about "spatial" relations, and it is not very difficult to see how assertions about physical properties and spatial relations are connected with "sense-data" or that a physical body is "a complex of sense-data"—unless we interpret these phrases as rather inadequate abbrevia-

tions of the assertion that all propositions containing the term "physical body" require for their verification the presence of sense-data. And this is certainly an exceedingly trivial statement.

In the case of the moon we might perhaps say that the meaning-requirement is fulfilled if we are able to "imagine" (picture mentally) situations which would verify our proposition. But if we should say in general that verifiability of an assertion implies possibility of "imagining" the asserted fact, this would be true only in a restricted sense. It would not be true in so far as the possibility is of the empirical kind, i.e., implying specific human capacities. I do not think, for instance, that we can be accused of talking nonsense if we speak of a universe of ten dimensions, or of beings possessing sense-organs and having perceptions entirely different from ours; and yet it does not seem right to say that we are able to "imagine" such beings and such perceptions, or a ten-dimensional world. But we *must* be able to say under what *observable* circumstances we should assert the existence of the beings or sense-organs just referred to. It is clear that I can speak meaningfully of the sound of a friend's voice without being able actually to recall it in my imagination. This is not the place to discuss the logical grammar of the word "to imagine"; these few remarks may caution us against accepting too readily a *psychological* explanation of verifiability.

We must not identify meaning with any of the psychological data which form the material of a mental sentence (or "thought") in the same sense in which articulated sounds form the material of a spoken sentence, or black marks on paper the material of a written sentence. When you are doing a calculation in arithmetic it is quite irrelevant whether you have before your mind the images of black numbers or of red numbers, or no visual picture at all. And even if it were empirically impossible for you to do any calculation without imagining black numbers at the same time, the mental pictures of those black marks could, of course, in no way be considered as constituting the meaning, or part of the meaning, of the calculation.

Carnap is right in putting great stress upon the fact (always emphasized by the critics of "psychologism") that the question of meaning has nothing to do with the psychological question as to the mental processes of which an act of thought may consist. But I am not sure that he has seen with equal clarity that reference to ostensive definitions (which we postulate for meaning) does *not* involve the error of a confusion of the two questions. In order to understand a sentence containing, e.g., the words "red flag," it is indispensable that I should be able to indicate a situation where I could point to an object which I should call a "flag," and whose color I could recognize as "red" as distinguished from other colors. But in order to do this it is *not* necessary that I should actually call up the image of a red flag. It is of the utmost importance to see that these two things have nothing in common. At this moment I am trying in vain to imagine the shape of a capital G in German print; nevertheless I can speak about it without talking nonsense,

and I know I should recognize it if I saw the letter. Imagining a red patch is utterly different from referring to an ostensive definition of "red." Verifiability has nothing to do with any images that may be associated with the words of the sentence in question.

No more difficulty than in the case of the other side of the room will be found in discussing, as another significant example, the question of "immortality," which Professor Lewis calls, and which is usually called, a *metaphysical* problem. I take it for granted that "immortality" is not supposed to signify never-ending life (for that might possibly be meaningless on account of infinity being involved), but that we are concerned with the question of survival after "death." I think we may agree with Professor Lewis when he says about this hypothesis: "Our understanding of what would verify it has no lack of clarity." In fact, I can easily imagine, e.g., witnessing the funeral of my own body and continuing to exist without a body, for nothing is easier than to describe a world which differs from our ordinary world only in the complete absence of all data which I would call parts of my own body.

We must conclude that immortality, in the sense defined, should not be regarded as a "metaphysical problem," but is an empirical hypothesis, because it possesses logical verifiability. It could be verified by following the prescription: "Wait until you die!" Professor Lewis seems to hold that this method is not satisfactory from the point of view of science. He says (143):

The hypothesis of immortality is unverifiable in an obvious sense . . . if it be maintained that only what is scientifically verifiable has meaning, then this conception is a case in point. It could hardly be verified by science; and there is no observation or experiment which science could make, the negative result of which would disprove it.

I fancy that in these sentences the private method of verification is rejected as being unscientific because it would apply only to the individual case of experiencing person himself, whereas a scientific statement should be capable of a *general* proof, open to any careful observer. But I see no reason why even this should be declared to be impossible. On the contrary, it is easy to describe experiences such that the hypothesis of an invisible existence of human beings after their bodily death would be the most acceptable explanation of the phenomena observed. These phenomena, it is true, would have to be of a much more convincing nature than the ridiculous happenings alleged to have occurred in meetings of the occultists—but I think there cannot be the slightest doubt as to the possibility (in the logical sense) of phenomena which would form a scientific justification of the hypothesis of survival after death, and would permit an investigation by scientific methods of that form of life. To be sure, the hypothesis could never be established as absolutely true, but it shares this fate with all hypotheses. If it should be

urged that the souls of the deceased might inhabit some supercelestial space where they would not be accessible to our perception, and that therefore the truth or falsity of the assertion could never be tested, the reply would be that if the words "supercelestial space" are to have any meaning at all, that space must be defined in such a way that the impossibility of reaching it or of perceiving anything in it would be merely empirical, so that some means of overcoming the difficulties could at least be described, although it might be beyond human power to put them into use.

Thus our conclusion stands. The hypothesis of immortality is an empirical statement which owes its meaning to its verifiability, and it has no meaning beyond the possibility of verification. If it must be admitted that science could make no experiment the negative result of which would disprove it, this is true only in the same sense in which it is true for many other hypotheses of similar structure—especially those that have sprung up from other motives than the knowledge of a great many facts of experience which must be regarded as giving a high probability to the hypothesis.

The question about the "existence of the external world" will be discussed in the next section.

V

Let us now turn to a point of fundamental importance and the deepest philosophic interest. Professor Lewis refers to it as the "egocentric predicament," and he describes as one of the most characteristic features of logical positivism its attempt to take this predicament seriously. It seems to be formulated in the sentence (128), "Actually given experience is given in the first person," and its importance for the doctrine of logical positivism seems to be evident from the fact that Carnap, in his *Der Logische Aufbau der Welt*, states that the method of this book may be called "methodological solipsism." Professor Lewis thinks, rightly, that the egocentric or solipsistic principle is not implied by our general principle of verifiability, and so he regards it as a second principle which, together with that of verifiability, leads, in his opinion, to the main results of the Viennese philosophy.

If I may be permitted to make a few general remarks here I should like to say that one of the greatest advantages and attractions of true positivism seems to me to be the antisolipsistic attitude which characterizes it from the very beginning. There is as little danger of solipsism in it as in any "realism," and it seems to me to be the chief point of difference between idealism and positivism that the latter keeps entirely clear of the egocentric predicament. I think it is the greatest misunderstanding of the positivist idea (often even committed by thinkers who called themselves positivists) to see in it a tendency towards solipsism or a kinship to subjective idealism. We

may regard *Vaihinger's Philosophy of As If* as a typical example of this mistake (he calls his book a "System of Idealistic Positivism"), and perhaps the philosophy of Mach and Avenarius as one of the most consistent attempts to avoid it. It is rather unfortunate that Carnap has advocated what he calls "methodological solipsism," and that in his construction of all concepts out of elementary data the "eigen-psychische Gegenstände" (for-me entities) come first and form the basis for the construction of physical objects, which finally lead to the concept of other selves; but if there is any mistake here it is chiefly in the terminology, not in the thought. "Methodological solipsism" is *not* a kind of solipsism, but a *method* of building up concepts. And it must be borne in mind that the order of construction which Carnap recommends—beginning with "for-me entities"—is not asserted to be the only possible one. It would have been better to have chosen a different order, but in principle Carnap was well aware of the fact that original experience is "without a subject" (see Lewis, *loc. cit.*, 145).

The strongest emphasis should be laid on the fact that primitive experience is absolutely neutral or, as Wittgenstein has occasionally put it, that immediate data "have no owner." Since the genuine positivist denies (with Mach, etc.) that original experience "has that quality or status, characteristic of all given experience, which is indicated by the adjective 'first person'" (*loc. cit.*, 145) he cannot possibly take the "egocentric predicament" seriously; for him this predicament does not exist. To see that primitive experience is *not* first-person experience seems to me to be one of the most important steps which philosophy must take towards the clarification of its deepest problems.

The unique position of the "self" is not a basic property of all experience, but is itself a fact (among other facts) of experience. Idealism (as represented by Berkeley's "esse-percipi" or by Schopenhauer's "Die Welt ist meine Vorstellung") and other doctrines with egocentric tendencies commit the great error of mistaking the unique position of the ego, which is an empirical fact, for a logical, *a priori* truth, or, rather, substituting the one for the other. It is worth while to investigate this matter and analyse the sentence which seems to express the egocentric predicament. This will not be a digression, for without the clarification of this point it will be impossible to understand the basic position of our empiricism.

How does the idealist or the solipsist arrive at the statement that the world, as far as I know it, is "my own idea," that ultimately I know nothing but the "content of my own consciousness"?

Experience teaches that all immediate data depend in some way or other upon those data that constitute what I call "my body." All visual data disappear when the eyes of this body are closed; all sounds cease when its ears are stuffed up; and so on. This body is distinguished from the "bodies of other beings" by the fact that it always appears in a peculiar perspective

(its back or its eyes, for instance, never appear except in a looking glass); but this is not nearly so significant as the other fact that the quality of *all* data is conditioned by the state of the organs of this particular body. Obviously these two facts—and perhaps originally the first one—form the only reason why this body is called “my” body. The possessive pronoun singles it out from among other bodies; it is an adjective which denotes the uniqueness described.

The fact that all data are dependent upon “my” body (particularly those parts of it which are called “sense-organs”) induces us to form the concept of “perception.” We do not find this concept in the language of unsophisticated, primitive people; they do not say, “I perceive a tree,” but simply, “there is a tree.” “Perception” implies the distinction between a subject which perceives and an object which is perceived. Originally the perceiver is the sense-organ or the body to which it belongs, but since the body itself—including the nervous system—is also one of the perceived things, the original view is soon “corrected” by substituting for the perceiver a new subject, which is called “ego” or “mind” or “consciousness.” It is usually thought of as somehow residing *in* the body, because the sense-organs are on the surface of the body. The mistake of locating consciousness or mind inside the body (“in the head”), which has been called “introjection” by R. Avenarius, is the main source of the difficulties of the so-called “mind-body problem.” By avoiding the error of introjection we avoid at the same time the idealistic fallacy which leads to solipsism. It is easy to show that introjection *is* an error. When I see a green meadow the “green” is declared to be a content of my consciousness, but it certainly is not inside my head. Inside my skull there is nothing but my brain; and if there should happen to be a green spot in my brain, it would obviously not be the green of the meadow, but the green of the brain.

But for our purpose it is not necessary to follow this train of thought; it is sufficient to restate the facts clearly.

It is a fact of experience that all data depend in some way or other upon the state of a certain body which has the peculiarity that its eyes and its back are never seen (except by means of a mirror). It is usually called “my” body; but here, in order to avoid mistakes, I shall take the liberty of calling it the body “M.” A particular case of the dependence just mentioned is expressed by the sentence, “I do not perceive anything unless the sense-organs of the body M are affected.” Or, taking a still more special case, I may make the following statement:

“I feel pain only when the body M is hurt.” (*P*)

I shall refer to this statement as “proposition *P*.”

Now let us consider another proposition (*Q*):

“I can feel only my pain.” (*Q*)

The sentence Q may be interpreted in various ways. *Firstly*, it may be regarded as equivalent to P , so that P and Q would just be two different ways of expressing one and the same empirical fact. The word "can" occurring in Q would denote what we have called "empirical possibility," and the words "I" and "MY" would refer to the body M . It is of the utmost importance to realize that in this first interpretation Q is the description of a fact of experience, i.e., a fact which we could very well imagine to be different.

We could easily imagine (here I am closely following ideas expressed by Mr. Wittgenstein) that I experience a pain every time the body of my friend is hurt, that I am gay when his face bears a joyful expression, that I feel tired after he has taken a long walk, or even that I do not see anything when his eyes are closed, and so forth. Proposition Q (if interpreted as being equivalent to P) denies that these things ever happen; but if they did happen, Q would be falsified. Thus we indicate the meaning of Q (or P) by describing facts which make Q true and other facts that would make it false. If facts of the latter kind occurred our world would be rather different from the one in which we are actually living; the properties of the "data" would depend on other human bodies (or perhaps only one of them) as well as upon the body M .

This fictitious world may be empirically impossible, because incompatible with the actual laws of nature—though we cannot at all be sure of this—but it is logically possible, because we were able to give a description of it. Now let us for a moment suppose this fictitious world to be real. How would our language adapt itself to it? It might be done in two different ways which are of interest for our problem.

Proposition P would be false. As regards Q , there would be two possibilities. The first is to maintain that its meaning is still to be the same as that of P . In this case Q would be false and could be replaced by the true proposition,

"I can feel somebody else's pain as well as my own." (R)

R would state the empirical fact (which for the moment we suppose to be true) that the datum "pain" occurs not only when M is hurt, but also when some injury is inflicted upon some other body, say, the body "O."

If we express the supposed state of affairs by the proposition R , there will evidently be no temptation and no pretext to make any "solipsistic" statement. *My* body—which in this case could mean nothing but "body M "—would still be unique in that it would always appear in a particular perspective (with invisible back, etc.), but it would no longer be unique as being the only body upon whose state depended the properties of all other data. And it was only this latter characteristic which gave rise to the ego-centric view. The philosophic doubt concerning the "reality of the external world" arose from the consideration that I had no knowledge of that world except by perception, i.e., by means of the sensitive organs of *my* body. If

this is no longer true, if the data depend also on other bodies *O* (which differ from *M* in certain empirical respects, but not in *principle*, then there will be no more justification in calling the data "*my own*"; other individuals *O* will have the same right to be regarded as owners or proprietors of the data. The sceptic was afraid that other bodies *O* might be nothing but images owned by the "mind" belonging to the body *M*, because everything seemed to depend on the state of the latter; but under the circumstances described there exists perfect symmetry between *O* and *M*; the egocentric predicament has disappeared.

You will perhaps call my attention to the fact that the circumstances we have been describing are fictitious, that they do not occur in our real world, so that in this world, unfortunately, the egocentric predicament holds its sway. I answer that I wish to base my argument only on the fact that the difference between the two words is merely empirical, i.e., proposition *P* just happens to be true in the actual world as far as our experience goes. Its denial does not even seem to be incompatible with the known laws of nature; the probability which these laws give to the falsity of *P* is not zero.

Now if we still agree that proposition *Q* is to be regarded as identical with *P* (which means that "*my*" is to be defined as referring to *M*), the word "*can*" in *Q* will still indicate *empirical* possibility. Consequently, if a philosopher tried to use *Q* as the basis of a kind of solipsism, he would have to be prepared to see his whole construction falsified by some future experience. But this is exactly what the true solipsist refuses to do. He contends that no experience whatever could possibly contradict him, because it would always necessarily have the peculiar for-me character, which may be described by the "egocentric predicament." In other words, he is well aware that solipsism cannot be based on *Q* as long as *Q* is, by definition, nothing but another way of expressing *P*. As a matter of fact, the solipsist who makes the statement *Q* attaches a different meaning to the same words; he does not wish merely to assert *P*, but he intends to say something entirely different. The difference lies in the word "*my*." He does not want to define the personal pronoun by reference to the body *M*, but uses it in a much more general way. This leads us to ask: What meaning does he give to the sentence *Q*?

Let us examine this *second* interpretation which may be given to *Q*.

The idealist or solipsist who says, "I can feel only my own pain," or, more generally, "I can be aware only of the data of my own consciousness," believes that he is uttering a necessary, self-evident truth which no possible experience can force him to sacrifice. He will have to admit the possibility of circumstances such as those we described for our fictitious world; but, he will say, even if I feel pain every time when another body *O* is hurt, I shall never say, "I feel *O*'s pain," but always, "My pain is in *O*'s body."

We cannot declare this statement of the idealist to be *false*; it is just a

different way of adapting our language to the imagined new circumstances, and the rules of language are, in principle, arbitrary. But, of course, some uses of our words may recommend themselves as practical and well adapted; others may be condemned as misleading. Let us examine the idealist's attitude from this point of view.

He rejects our proposition *R* and replaces it by the other one:

"I can feel pain in other bodies as well as in my own." (*S*)

He wants to insist that any pain I feel must be called *my* pain, no matter where it is felt, and in order to assert this he says:

"I *can* feel only *my* pain." (*T*)

Sentence *T* is, as far as the words are concerned, the same as *Q*. I have used slightly different signs by having the words "can" and "my" printed in italics, in order to indicate that, when used by the solipsist, these two words have a signification which is different from the signification they had in *Q* when we interpreted *Q* as meaning the same as *P*. In *T* "my pain" no longer means "pain in body M," because, according to the solipsist's explanation, "my pain" may also be in another body O; so we must ask: What does the pronoun "my" signify here?

It is easy to see that it does not signify *anything*; it is a superfluous word which may just as well be omitted. "I feel pain" and "I feel my pain" are, according to the solipsist's definition, to have identical meaning; the word "my," therefore, has no function in the sentence. If he says, "The pain which I feel is my pain," he is uttering a mere tautology, because he has declared that whatever the empirical circumstances may be, he will never allow the pronouns "your" or "his" to be used in connection with "I feel pain," but always the pronoun "my." This stipulation, being independent of empirical facts, is a logical rule, and if it is followed, *T* becomes a tautology; the word "can" in *T* (together with "only") does not denote empirical impossibility, but *logical* impossibility. In other words it would not be false, it would be *nonsense* (grammatically forbidden) to say "I can feel somebody else's pain." A tautology, being the negation of nonsense, is itself devoid of meaning in the sense that it does not assert anything, but merely indicates a rule concerning the use of words.

We infer that *T*, which is the second interpretation of *Q*, adopted by the solipsist and forming the basis of his argument, is strictly meaningless. It does not say anything at all, does not express any interpretation of the world or view about the world; it just introduces a strange way of speaking, a clumsy kind of language, which attaches the index "my" (or "content of my consciousness") to everything without exception. Solipsism is nonsense, because its starting-point, the egocentric predicament, is meaningless.

The words "I" and "my," if we use them according to the solipsist's prescription, are absolutely empty, mere adornments of speech. There would

be no difference of meaning between the three expressions, "I feel my pain"; "I feel pain"; and "there is pain." Lichtenberg, the wonderful eighteenth-century physicist and philosopher, declared that Descartes had no right to start his philosophy with the proposition "I think," instead of saying "it thinks." Just as there would be no sense in speaking of a white horse unless it were logically possible that a horse might *not* be white, so no sentence containing the words "I" or "my" would be meaningful unless we could replace them by "he" or "his" without speaking nonsense. But such a substitution is impossible in a sentence that would seem to express the egocentric predicament or the solipsistic philosophy.

R and *S* are not different explanations or interpretations of a certain state of affairs which we have described, but simply verbally different formulations of this description. It is of fundamental importance to see that *R* and *S* are not two propositions, but one and the same proposition in two different languages. The solipsist, by rejecting the language of *R* and insisting upon the language of *S*, has adopted a terminology which makes *Q* tautological, transforms it into *T*. Thus he has made it impossible to verify or falsify his own statements; he himself has deprived them of meaning. By refusing to avail himself of the opportunities (which we showed him) to make the statement "I can feel somebody else's pain" meaningful, he has at the same time lost the opportunity of giving meaning to the sentence "I can feel only my own pain."

The pronoun "my" indicates possession; we cannot speak of the "owner" of a pain—or any other datum—except in cases where the word "my" can be used meaningfully, i.e., where by substituting "his" or "your" we would get the description of a possible state of affairs. This condition is fulfilled if "my" is defined as referring to the body *M*, and it would also be fulfilled if I agree to call "my body" any body in which I can feel pain. In our actual world these two definitions apply to one and the same body, but that is an empirical fact which might be different. If the two definitions did not coincide and if we adopted the second one we should need a new word to distinguish the body *M* from other bodies in which I might have sensations; the word "my" would have meaning in a sentence of the form "A is one of my bodies, but B is not," but it would be meaningless in the statement "I can feel pain only in my bodies," for this would be a mere tautology.

The grammar of the word "owner" is similar to that of the word "my": it makes sense only where it is logically possible for a thing to *change* its owner, i.e., where the relation between the owner and the owned object is empirical, not logical ("external," not "internal"). Thus one could say "Body *M* is the owner of this pain," or "that pain is owned by the bodies *M* and *O*." The second proposition can, perhaps, never be truthfully asserted in our actual world (although I cannot see that it would be incompatible with the laws of nature), but both of them would make sense. Their meaning would be to express certain relations of dependence between the

pain and the state of certain bodies, and the existence of such a relation could easily be tested.

The solipsist refuses to use the word "owner" in this sensible way. He knows that many properties of the data do not depend at all upon any states of human bodies, viz., all those regularities of their behavior that can be expressed by "physical laws"; he knows, therefore, that it would be wrong to say "my body is the owner of everything," and so he speaks of a "self," or "ego," or "consciousness," and declares this to be the owner of everything. (The idealist, by the way, makes the same mistake when he asserts that we know nothing but "appearances.") This is nonsense because the word "owner," when used in this way, has lost its meaning. The solipsistic assertion cannot be verified or falsified, it will be true by definition, whatever the facts may be; it simply consists in the verbal prescription to add the phrase "owned by me" to the names of all objects, etc.

Thus we see that unless we choose to call our body the owner or bearer of the data—which seems to be a rather misleading expression—we have to say that the data *have no owner* or bearer. This neutrality of experience—as against the subjectivity claimed for it by the idealist—is one of the most fundamental points of true positivism. The sentence "All experience is first-person experience" will either mean the simple empirical fact that all data are in certain respects dependent on the state of the nervous system of my body M, or it will be meaningless. Before this physiological fact is discovered, experience is not "my" experience at all, it is self-sufficient and does not "belong" to anybody. The proposition "The ego is the centre of the world" may be regarded as an expression of the same fact, and has meaning only if it refers to the body. The concept of "ego" is a construction put upon the same fact, and we could easily imagine a world in which this concept would not have been formed, where there would be no idea of an insurmountable barrier between what is inside the Me and what is outside of it. It would be a world in which occurrences like those corresponding to proposition *R* and similar ones were the rule, and in which the facts of "memory" were not so pronounced as they are in our actual world. Under those circumstances we should not be tempted to fall into the "egocentric predicament," but the sentence which tries to express such a predicament would be meaningless under *any* circumstances.

After our last remarks it will be easy to deal with the so-called problem concerning the existence of the external world. If, with Professor Lewis (143), we formulate the "realistic" hypothesis by asserting, "If all minds should disappear from the universe, the stars would still go on in their courses," we must admit the impossibility of verifying it, but the impossibility is merely *empirical*. And the empirical circumstances are such that we have every reason to believe the hypothesis to be true. We are as sure of it as of the best-founded physical laws that science has discovered.

As a matter of fact, we have already pointed out that there are certain

regularities in the world which experience shows to be entirely independent of what happens to human beings on the earth. The laws of motion of the celestial bodies are formulated entirely without reference to any human bodies, and *this is the reason* why we are justified in maintaining that they will go on in their courses after mankind has vanished from the earth. Experience shows no connection between the two kinds of events. We observe that the course of the stars is no more changed by the death of human beings than, say, by the eruption of a volcano, or by a change of government in China. Why should we suppose that there would be any difference if all living beings on our planet, or indeed everywhere in the universe, were extinguished? There can be no doubt that on the strength of empirical evidence the existence of living beings is no necessary condition for the existence of the rest of the world.

The question "Will the world go on existing after I am dead?" has no meaning unless it is interpreted as asking "Does the existence of the stars etc., depend upon the life or death of a human being?" and this question is answered in the negative by experience. The mistake of the solipsist or idealist consists in rejecting this empirical interpretation and looking for some metaphysical issue behind it; but all their efforts to construct a new sense of the question end only in depriving it of its old one.

It will be noticed that I have taken the liberty of substituting the phrase "if all living beings disappeared from the universe." I hope it will not be thought that I have changed the meaning of the issue by this substitution. I have avoided the word "mind" because I take it to signify the same as the words "ego" or "consciousness," which we have found to be so dark and dangerous. By living beings I meant beings capable of perception, and the concept of perception had been defined only by reference to living *bodies*, to physical organs. Thus I was justified in substituting "death of living beings" for "disappearance of minds." But the arguments hold for any empirical definition one may choose to give for "mind." I need only point out that, according to experience, the motion of the stars, etc., is quite independent of all "mental" phenomena such as feeling joy or sorrow, meditating, dreaming, etc.; and we may infer that the course of the stars would not be affected if those phenomena should cease to exist.

But is it true that this inference could be verified by experience? Empirically it seems to be impossible, but we know that only logical possibility of verification is required. And verification without a "mind" is logically possible on account of the "neutral," impersonal character of experience on which we have insisted. Primitive experience, mere existence of ordered data, does not presuppose a "subject," or "ego," or "Me," or "mind"; it can take place without any of the facts which lead to the formation of those concepts; it is not an experience of anybody. It is not difficult to imagine a universe without plants and animals and human bodies (including the body M), and without the mental phenomena just referred to; it would certainly be

a "world without minds" (for what else could deserve this name), but the laws of nature might be exactly the same as in our actual world. We could describe this universe in terms of our actual experience (we would only have to leave out all terms of referring to human bodies and emotions); and that is sufficient to speak of it as a world of possible experience.

The last considerations may serve as an example of one of the main theses of true positivism: that the naïve representation of the world, as the man in the street sees it, is perfectly correct; and that the solution of the great philosophical issues consists in returning to this original world-view, after having shown that the troublesome problems arose only from an inadequate description of the world by means of a faulty language.

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relative to the aims of a particular type of inquiry. See also H. Feigl, "De Principis Non Disputandum . . . ?" in *Philosophical Analysis*, Max Black (ed.), Ithaca, N.Y., Cornell University Press, 1950. There is a critical discussion of Feigl's paper in P. B. Rice, *On the Knowledge of Good and Evil*, New York, Random House, 1955, pp. 161-173. Carnap's paper has been criticized in W. V. Quine, "On Carnap's Views on Ontology," *Philosophical Studies* (October, 1951). Carnap's attempt to define analyticity relatively to semantical rules is criticized in W. V. Quine's important paper "Two Dogmas of Empiricism," *Philosophical Review* (January, 1960), reprinted in W. V. Quine, *From a Logical Point of View*, Cambridge, Mass., Harvard University Press, 1953. This paper also criticizes the verifiability criterion of meaning.

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ORDINARY LANGUAGE PHILOSOPHY

Introduction

This section, like the one on Logical Positivism, deals not with a single man but with a whole movement. In the absence of any better term, we may call it Ordinary Language Philosophy, after one of its main preoccupations; but the reader should be warned not to draw any inference from this *label* until he has examined the writings of the philosophers themselves. Because the chief source of the movement is the later work of Wittgenstein, we shall discuss him first.

Ludwig Josef Johann Wittgenstein was born in Vienna on April 26, 1889. His family was both wealthy and distinguished. (His brother Paul was a pianist who lost his right arm in World War I, and it was for him that Ravel wrote his famous *Concerto for the Left Hand*.) Wittgenstein's original training was in engineering, and in 1908 he went to England to do advanced study and research, particularly in aeronautics. Among other things, he worked on a jet reaction propeller. His interest in engines continued throughout his lifetime, and mechanical analogies are often found in the *Philosophical Investigations*.¹

Soon after he arrived in England his interests began to shift to pure mathematics and then to the foundations of mathematics. For instruction in the latter he went to Cambridge to study with Russell. This momentous step took place in 1911, and the encounter had far-reaching implications for both parties. (For a generous acknowledgment by Russell, see p. 298.) Russell tells

the following story about Wittgenstein's early days at Cambridge: "At the end of his first term at Cambridge he came to me and said: 'Will you please tell me whether I am a complete idiot or not?' I replied, 'My dear fellow, I don't know. Why are you asking me?' He said, 'Because, if I am a complete idiot, I shall become an aeronaut; but, if not, I shall become a philosopher.' I told him to write me something during the vacation on some philosophical subject and I would then tell him whether he was a complete idiot or not. At the beginning of the following term he brought me the fulfillment of this suggestion. After reading only one sentence, I said to him: 'No, you must not become an aeronaut.'" ² At the outbreak of the war Wittgenstein enlisted in the Austrian army and saw active duty on several fronts. During this service the *Tractatus Logico-Philosophicus*³ was composed. This work was the distillation of his thinking on logical and semilogical problems of the sort that grew out of a concern with the foundations of mathematics; it served as a definitive formulation of an extreme kind of logical atomism, but with a very definite individual stamp from its author.

One main conclusion of that work is that all philosophical propositions (or would-be propositions) are senseless, the philosophical contribution of the book being to show that this is the case. One who took this conclusion seriously would have to abandon philosophy, and Wittgenstein always did take things seriously.* Accordingly, after having given away his considerable inheritance, he spent the postwar years 1920–1926 as a schoolmaster in various remote villages in Lower Austria. When personal frictions led him to abandon this career, he worked for a time as a gardener's assistant in a monastery, then spent two years building a mansion for his sister. During this period Wittgenstein was not wholly cut off from philosophy. For example, he had many conversations with Moritz Schlick, conversations which provided much of the stimulus for the early activities of the Vienna Circle.

By 1928 Wittgenstein felt that he could again do creative work in philosophy. Perhaps he had already come to have doubts about the finality of the *Tractatus*. He returned to Cambridge as a graduate student and received the Ph.D. upon submission of the *Tractatus* as his thesis. In 1930 he was made a Fellow of Trinity College, and in 1939 he succeeded to G. E. Moore's chair in philosophy. From 1930 until he resigned his professorship in 1947, Wittgenstein lectured at Cambridge, with some intermissions. These lectures exercised an

* Even after he had returned to philosophy, Wittgenstein continued to have serious reservations about the profession. Professor Norman Malcolm, in his extremely interesting memoir on Wittgenstein, relates how Wittgenstein tried to persuade him to abandon a philosophical career in favor of "some manual job instead, such as working on a ranch or farm. He had an abhorrence of academic life in general and of the life of a professional philosopher in particular. He believed that a normal human being could not be a university teacher and also an honest and serious person. . . . Wittgenstein could not stand the society of academic colleagues. Although a Fellow of Trinity, he did not dine in Hall. He told me that he had tried to do it (there is an anecdote to the effect that he was once reprimanded by the Vice-Master for not wearing a tie at the High Table) but was revolted by the artificiality of the conversation. He really *hated* all forms of affectation and insincerity. Wittgenstein several times renewed the attempt to persuade me to give up philosophy as a profession. He commonly did this with other students of his."⁴ The main grounds for this advice seems to have been that, in his view, a professional philosopher is faced with an overwhelming temptation to deceive himself and others as to what he understands.

enormous influence both on those who heard them and on many who read the notes, known as the Blue Book and the Brown Book, which were circulated more or less clandestinely. (Since Wittgenstein's death these notes have been published.) In fact these lectures may be said to have inaugurated the latest phase of analytical philosophy, as the *Tractatus* summed up logical atomism and inspired logical positivism. Malcolm gives us a vivid picture of the unique character of Wittgenstein's lectures.

His lectures were given without preparation and without notes. He told me that once he had tried to lecture from notes but was disgusted with the result; the thoughts that came out were "stale." . . . In the method that he came to use, his only preparation for the lecture, as he told me, was to spend a few minutes before the class met, recollecting the course that the inquiry had taken at the previous meetings. . . . His words came out, not fluently, but with great force. Anyone who heard him say anything knew that here was a singular person. His face was remarkably mobile and expressive when he talked. His eyes were deep and often fierce in their expression. His whole personality was commanding, even imperial. He met his class twice weekly for a two-hour meeting, from five to seven P.M. He demanded promptness and became angry if someone came in two minutes late. Before he was a professor the meetings were mainly held in the college rooms of various friends of his, and thereafter in his own rooms in Whewell's Court, Trinity College. . . . Wittgenstein sat in a plain wooden chair in the centre of the room. Here he carried on a visible struggle with his thoughts. We often felt that he was confused, and said so. Frequently he said things like "I'm a fool," "You have a dreadful teacher!" "I'm just too stupid today," . . . Wittgenstein commonly directed questions at various people present and reacted to their replies. Often the meetings consisted mainly of dialogue. Sometimes, however, when he was trying to draw a thought out of himself, he would prohibit, with a peremptory motion of the hand, any questions or remarks. There were frequent and prolonged periods of silence, with only an occasional mutter from Wittgenstein, and the stillest attention from the others. During these silences, Wittgenstein was extremely tense and active. His gaze was concentrated; his face was alive; his hands made arresting movements; his expression was stern. One knew that one was in the presence of extreme seriousness, absorption, and force of intellect.

Wittgenstein was uncompromising; he had to have *complete* understanding. He drove himself fiercely. His whole being was under a tension. No one at the lectures could fail to perceive that he strained his will, as well as his intellect, to the utmost. This was one aspect of his absolute, relentless honesty. Primarily, what made him an awesome and even terrible person, both as a teacher and in personal relationships, was his ruthless integrity, which did not spare himself or anyone else.⁵

But Wittgenstein was not happy in the academic routine, and in 1947 he finally resigned his chair and visited various places, seeking solitude and appropriate conditions for philosophical work. These restless wanderings were terminated by his death in Cambridge on April 29, 1951.

After the *Tractatus* Wittgenstein published nothing except for a short article in 1930, "Some Remarks on Logical Form." No doubt there were very complicated reasons for his failure to do so, the most obvious being the extremely

high standard he set for his work. After his death his most important manuscript, entitled *Philosophical Investigations*, was published, and this work shows promise of exercising at least as great an influence as the *Tractatus*. As we pointed out in the Preface, we have been unable to include here any selection from the *Philosophical Investigations*. However, rather than passing over what may be the most significant philosophical work of this century, we shall attempt to give the reader some idea of the philosophical character of the book. It is hoped that the reader will thereby be stimulated to follow up our reference in the *Investigations* itself.

Before he could develop his new philosophy, Wittgenstein had to work himself out of the hole he had dug for himself in the *Tractatus*. In the preface to the *Philosophical Investigations* he writes: "Four years ago I had occasion to reread my first book and to explain its ideas to someone. It suddenly seemed to me that I should publish those old thoughts and the new ones together; that the latter could be seen in the right light only by contrast with and against the background of my old way of thinking." The first one hundred sections of the *Investigations* are taken up largely with a critique of logical atomism. By examining this critique, we can see some of the factors that led Wittgenstein, as well as many others, to become dissatisfied with this philosophy.

Logical atomism was primarily a search for the indivisible units of which reality is composed, and the "logically proper" names that could be found in the ideal language would be designations of such simples. Unfortunately its adherents experienced considerable difficulty in providing plausible examples of absolutely simple entities, and of absolutely atomic facts that would contain only such simples. For example, consider John Wisdom's doubts about the only example of a logically proper name that Russell ventured to offer, "this." "I have a similar fear about 'this.' If I speak not to myself but to someone else and say 'This is red' I use 'This' as meaning something like 'The thing to which I am pointing.' It is to be hoped that sometimes when I talk to myself I use it to mean something. My last sentence is not a joke. . . . It means that it is to be hoped that sometimes there is something such that I am using 'this' as a name for it."⁶

In paragraphs 46–48 of *Philosophical Investigations* Wittgenstein suggests a reason for such difficulties. A term such as "simple" has a use only in a certain context, where there is already a restriction (implicit or explicit) to a certain respect. One cannot find something that is simple absolutely, because no meaning can be given to such a phrase. And even if we could find such simples, a restatement of ordinary statements in terms of them would have no priority over the original utterance (59–64).^{*} There would be two ways of saying something, each of which might be useful for certain purposes. Here we have a rejection of the entire conception of analysis embodied in logical atomism. We shall see shortly what Wittgenstein put in its place.

Wittgenstein goes further in attacking the notion of any "ideal language," any language that would perfectly embody logical ideals of precision, unambiguity, explicitness, and so on. This he does partly via an attack on the notion of absolute precision, similar to the attack on absolute simplicity (70–71, 84, 88),

^{*} Parenthetical references, except when otherwise indicated, are to numbered sections of Part I of *Philosophical Investigations*.

and partly via an attack on the sort of thinking that lies behind the demand for an ideal language. The logical atomist looks at language in abstraction from the real life situations in which it works, and this hypostatization has several dire results. First, it appears mysterious that a word should mean, or refer to, something, or that a proposition should state a fact (92–94). In order to penetrate this mystery, we are driven to employ misleading models. We suppose that every meaningful word must name something and that the object is its meaning (26–27). And if that is not the way words work in ordinary language, as it is not, then so much the worse for ordinary language (40–42). (And we think of the proposition as a picture of a state of affairs [96].) Second, having disengaged language from the jobs it performs, we impose on it unrealistic standards of exactness and simplicity. And we deceive ourselves into thinking that we really discovered this ideal in the objective world (91, 96–103, 107). The cure for this obsession is to put sentences and words back into the concrete situations in which they normally function and see how they work there. If we do, we will see that they have a multiplicity of intelligible, nonmysterious jobs to do (23), which they are performing very efficiently as they are. “The *pre-conceived idea* of crystalline purity can only be removed by turning our whole examination round. (One might say: the axis of reference of our examination must be rotated, but about the fixed point of our real need” [108].) This concentration on the use of expressions in concrete situations plays an important part in the new conception of philosophy which Wittgenstein forged, to which we now turn our attention.

English-speaking philosophers in this century have become increasingly preoccupied with linguistic questions. This preoccupation, which reaches its climax in the philosophies represented in this section, has passed through several fairly well-defined stages, which can be represented schematically as follows. For the logical atomist the chief *philosophical* point of examining language was that it enabled one to perform more effectively the traditional metaphysical task of arriving at the ultimate structure of reality. It was felt that the only effective way to do this was first to construct the outlines of a logically adequate language and then to read off the structure of reality from that. Moreover it was felt that a conscious analysis of language would protect one from being unconsciously victimized by linguistic forms, as previous metaphysicians had been. Of course, logical atomists such as Russell had other reasons for attending to language. For example, the development of a new logic required much attention to the various forms of propositions. But the metaphysical aim was the central one philosophically.

To the logical positivists, who have rejected metaphysics, the philosophical interest in language has somewhat different motives. Philosophy is conceived as the logical analysis of the language of science (using “science” in so broad a sense as to cover any discourse that will satisfy the positivistic requirements of meaningfulness). But familiar philosophical problems reappear in linguistic guise. For example, the ancient doctrine of materialism reappears in the guise of a thesis that a physicalistic language is adequate for the formulation of all of science (see Carnap’s “The Unity of Science”). Philosophy still tries to reach *solutions* to the old problems, although it restates them in what is supposed to be a purified form.

In the later work of Wittgenstein the examination of language is undertaken in the service of new and more radical aims. This new approach to philosophy is the development of still another strain in that fertile mother of philosophies, the *Tractatus*, one quite different from those developed in logical atomism and logical positivism.

The right method of philosophy would be this. To say nothing except what can be said, i.e., the propositions of natural science, i.e., something that has nothing to do with philosophy: and then always, when someone else wished to say something metaphysical, to demonstrate to him that he had given no meaning to certain signs in his propositions. This method would be unsatisfying to the other—he would not have the feeling that we were teaching him philosophy—but it would be the only strictly correct method.⁷

In this approach the traditional problems of philosophy are viewed as perplexities, puzzles, paradoxes (123). Preoccupation with such a problem is regarded as a sort of disease from the throes of which one seeks deliverance (255). The task of the philosopher is a therapeutic one—to relieve the patient's anxieties over the existence of other minds, the reality of the external world, or whatever it might be that "bothers" him. This therapy is to be carried out by showing the philosopher just what he is doing when he worries about such problems, in the hope that once he sees clearly what is going on he will be relieved of the inclination to raise the question (133).^{*} (Cf. the technique of psychoanalysis. More specifically, what Wittgenstein tries to get the frustrated philosopher to see is that his difficulties stem from the fact that his questions are based on linguistic confusions, that he is led to ask them only because he has yielded to the temptation to employ expressions outside the contexts which give them their meaning (109, 119); his problems rest on a *misuse* of language. If we can get him to see this, he will see that the questions that have been torturing him are unanswerable because they are senseless.

So far this does not sound radically different from orthodox positivism. Schlick and Carnap also try to show that philosophical questions rest on linguistic confusions, and that they cannot be answered because they are senseless. Yet there are profound differences in the two approaches; to see them is to go to the heart of Wittgenstein's later thought.

First, let us remember that the logical positivist proceeds by laying down a theory of meaning, or at least a criterion stating a necessary condition of meaningfulness, and then rejecting all philosophical formulations that fail to come up to this. Let us remember, too, that the positivist encountered certain obstacles in trying to carry out this program. For one thing, he was faced with the embarrassing question as to the status of his theory of meaning. Was *it* empirically confirmable? And if not, was it simply a definition? And if so, a definition of

^{*} This is likely to suggest that Wittgenstein felt that a concern with philosophical problems is an unmitigated evil and that one would be much better off if such problems had never occurred to him. Once one has fallen victim to them, there is a point in curing him; but it would be wicked to induce preoccupation with philosophical puzzles in anyone. It is doubtful that Wittgenstein held this position, but one does not find in his published work a clear statement of any value to be gained from reflection on philosophical problems. Perhaps we can take Wisdom's view, expounded later, as an approximation to what Wittgenstein thought on this point.

"meaning" as used by whom? (Remember that Wittgenstein had anticipated these difficulties in the *Tractatus*, and had attempted to side-step them by the bold avowal that everything he had been saying was nonsense.) Second, interminable disputes arose over the adequacy of the criterion of meaning, apparently the same sorts of disputes which that criterion was designed to forestall.

The Wittgenstein of the *Investigations* is free from such embarrassments. He lays down no general criterion of meaningfulness. Instead he deals *ad hoc* with each philosophical perplexity as it arises, seeking to exhibit the specific confusion from which it arises. This piecemeal approach is more likely to make the charge of confusion plausible in particular cases than is the mechanical procedure of repeatedly applying a general criterion. It is because Wittgenstein's aim is always to get the reader to see something in a particular case, rather than to establish a general thesis, that the *Philosophical Investigations* consists so largely of unanswered questions, fragmentary hints, challenging injunctions, and contains so few arguments.

It is not just a difference in strategy that separates the later Wittgenstein from the positivists. This divergence is rooted in a more profound difference as to the nature of language and of meaning. I have said that Wittgenstein did not appeal to any general criterion of meaningfulness in reaching conclusions on particular philosophical points; nevertheless, his piecemeal attack on these problems was guided by certain general convictions about language, which we must now examine.

A slogan popularized by Wittgenstein at Cambridge in the 1930's was: "Don't look for the meaning, look for the use." The negative part of this injunction reflected a dissatisfaction with a reductive sort of analysis, one that tries to clarify ordinary expressions by replacing them with supposedly ideally simple or clear expressions, each of which is supposed to refer transparently to some extra-linguistic entity, which is its meaning. This kind of enterprise had been ending in frustration, and Wittgenstein thought he saw why. "Look for the use." He had become convinced that the crucial fact about a linguistic expression—at least in the context of philosophical elucidation—is the way it is used in the varied contexts in which it is actually employed. If we want to get insight into a basic term (concept), such as "cause," "know," or "think," we must examine the various situations in which the term is actually employed and see what job(s) it is performing. This will give us everything we need to know for the purposes of philosophical elucidation. For example, in attacking the idea that there is a single ideal of absolute exactness toward which we should strive, Wittgenstein writes:

We understand what it means to set a pocket watch to the exact time or to regulate it to be exact. But what if it were asked: is this exactness ideal exactness, or how ready does it approach the ideal? . . . Now, if I tell someone: "you should come to dinner more punctually; you know it begins at one o'clock exactly"—is there really no question of *exactness* here? Because it is possible to say: "Think of the determination of time in the laboratory or the observatory; *there* you see what 'exactness' means."

"Inexact" is really a reproach, and "exact" is praise and that is to say that what is inexact attains its goal less perfectly than what is more exact (88).

(For other examples, see sections 47, 246–247, 261, 291, 481–483.) This new way of philosophizing requires a radical reorientation in our way of viewing language. We are to look upon language as an instrument for the accomplishment of various human ends, and on words as tools which are used to do various kinds of jobs. The use of a given expression is a function of the mode of activity, the “form of life” in the context of which it occurs (19).

Now it is true that the positivists were, in a way, also interested in the use of expressions. In fact, in the selection from Schlick, who is closer to the later Wittgenstein than is Carnap or the other positivists,* there is a passage that might almost have come from the *Philosophical Investigations*. “Thus, whenever we ask about a sentence, ‘What does it mean?’ what we expect is instruction as to the circumstances in which the sentence is to be used” (see p. 470), and yet even here there are crucial differences. In the above passage Schlick, like the other positivists, was restricting his attention to the use of sentences to make empirically testable statements. Thus after the material quoted, he goes on to say, “we want a description of the conditions under which the sentence will form a *true* proposition, and of those which will make it *false*.” It goes without saying that “instruction as to the circumstances in which the sentence is to be used” will always consist of the specification of such conditions. Wittgenstein, on the other hand, emphasizes the great variety of ways in which expressions are used (23, 27, 304). The logical positivist approaches any utterance with the question; “Is it empirically confirmable?” But Wittgenstein sets himself against this, as he does against all forms of reductionism. He stresses the fact that there are many utterances with respect to which it is not even relevant to ask such a question, for example, *reports of feeling*. The question, “empirically confirmable?” is but one of the interesting questions to be asked of sentences. By asking other questions we can make important distinctions within the class of the nonverifiable (as well as within the verifiable), rather than tossing them indiscriminately into a basket labeled “emotive.”

Another salient difference is this. For Carnap, after traditional philosophical formulations have been convicted of meaninglessness, the next step is the construction of a purified language in which acceptable discourse such as science could be stated in a logically acceptable way, and with respect to which analogues of the traditional philosophical problems would arise. The interest in the use of expressions and in rules governing their use is focused on the purified language, ordinary language is looked down upon as hopelessly mired in vagueness and confusion. But Wittgenstein finds no philosophical value in the construction of artificial languages. From his point of view this enterprise springs from bewitchment of the same sort as that to which more traditional philosophers were subject. Wittgenstein’s strategy is to move from traditional philosophical discussions, not toward a “logically adequate language,” but back to ordinary language (116, 117, 134, 194). He is convinced that if we are able to see the ways in which certain crucial expressions are employed in quite ordinary situations where we know how to handle them, where they are obviously doing a discernible job, we will then see that they are *not* doing any such job when they figure

* Carnap has backslid seriously on this point in recent years. In such books as *Meaning and Necessity*⁸ he completely succumbs to the tendency to treat the meaning of an expression as an entity designated by the expression.

in philosophical questions and theories. We may even come to see what it is that has led us to push the expression beyond the limits of its intelligible employment, namely, some picture that has imposed on us a false view of the use of the expression in question and thereby seduced us into *useless* utterances. A device Wittgenstein often uses for bringing out the actual use of an expression is the *language game*, an extremely simple sort of language in which we can see certain sorts of uses more clearly than in the complex fabric of our actual speech (for other examples, see 2, 8, 21, 41, 48). It is important to note that language games are used to throw light on ordinary language by contrast as well as by similarity. This is particularly the case when they are used to depict a language for which a theory of language that is too simple for ordinary language would be adequate (2, 48).

The depiction of the ordinary use of expressions, and the contrast with the attempted philosophical employment, become the chief instruments for Wittgenstein's program of relieving the compulsion to ask philosophical questions. This compulsion is to be relieved not by proving any thesis to the philosophically perplexed, or by imparting any new information to him, but simply by reminding him of what he already (in a way) knew, namely, the sorts of uses which the various expressions of the language typically have (89, 109, 126, 127, 129). "The work of the philosopher consists in assembling reminders for a particular purpose" (127).

In view of the epigrammatic style of the *Philosophical Investigations*, it might be of aid to the reader if we were to spell out in a more explicit and systematic way Wittgenstein's treatment of a particular problem. In this way we can both give a more concrete content to the above characterization of the procedure and offer a model for the interpretation of other parts of the work.

For this purpose we shall take Wittgenstein's treatment of the problem of other minds, which is one of the fullest, and at the same time one of the most difficult, discussions in the *Investigations*. This will also provide a background for Austin's essay on the same topic.

The starting point is the old problem of our knowledge of other minds, a problem that has tortured philosophers for centuries. Succinctly put, it is as follows: What basis do I have for supposing that there are beings other than myself who have feelings, sensations, thoughts, and other conscious states? For all that I can ever observe in their case is their bodies and the behavior of those bodies, including of course sounds issuing therefrom. It is only in my own case that I can directly apprehend conscious states themselves. Hence in the case of other people, I must infer their existence from the behavior that I do observe. Now in my own case I can observe not only the conscious states but also the constant correlations between certain sorts of conscious states and certain states and activities of my own body (for example, a feeling of anger and a certain kind of facial expression). I can then infer that such bodily conditions in others are accompanied by like feelings. But this is a very weak form of inference, for it draws a conclusion for an indefinitely large class from a single case.

The urgency of the problem derives, in large part, from the contrast between my knowledge of my own feelings and my knowledge of the feelings of others. I feel dissatisfied with the basis I have for assertions concerning my neighbor's feelings, because I think that in the unshakable, immediate knowledge of my

own I have a standard with which to compare them unfavorably. Hardly anyone before Wittgenstein had so much as questioned this assumption. And, indeed, it seems obvious that my knowledge of my own conscious states constitutes an absolute cognitive ideal. Yet to Wittgenstein there is a great confusion embedded here. "It can't be said of me at all (except perhaps as a joke) that I *know* I am in pain. What is it supposed to mean—except perhaps that I *am* in pain?" (246). The word "know" has no function here, because there is no contrast. Doubt, ignorance, mistake, all the alternatives to knowledge, have no place. Their attribution in this sort of situation makes no sense. ". . . if anyone said 'I do not know if what I have got is a pain or something else,' we should think something like, he does not know what the English word 'pain' means; and we should explain it to him" (288). That is, "I know that . . ." has the role of signifying the absence of mistake, doubt, and so on; and, in an area in which those concepts have no application, there is no job for "know" to do. This destroys the model that we were employing.

When we are first confronted with this argument, it may strike us as legerdemain. If I am not expressing my knowledge of my mental state when I say "I feel angry," then what am I doing? Surely I am making a report, which can be true or false; and if so, the questions of *whether* and *how* I know the report to be true are surely in order, even if the answer is so obvious as to be not worth mentioning. It is incumbent on Wittgenstein to provide an alternative account of the use of "I feel angry" and other first-person present-tense feeling-sentences. This he does by directing us to consider the way in which the use of such sentences is learned, a favorite device for bringing out the logical status of an expression. "How does a human being learn the meaning of the names of sensations?—of the word 'pain' for example." Here is one possibility: words are connected with the primitive, the natural expressions of the sensation and used in their place. A child has hurt himself and he cries; adults talk to him and teach him exclamations and then sentences. They teach the child new pain-behavior (244). It is not clear just what Wittgenstein intends to be claiming here. He could hardly have supposed that first-person pain reports are in every way equivalent to groans and cries (see *Philosophical Investigations*, p. 189). But, as is his wont, Wittgenstein simply throws out the suggestion without making any attempt to spell out the particular respects in which the two are alike and different. Presumably, Wittgenstein at least wanted to point out that in neither case can any question of a mistake arise, although in both cases it is possible that the person is feigning. Insincerity is the only form of "falsity" possible for a report of one's sensations or feelings. He wants us to keep this in mind when we are tempted to assimilate the feeling-report to a statement about physical objects, on the grounds that both are capable of truth and falsity. However, this is a long way from a complete account of such utterances.

Even if our model had been taken away, we might still continue to feel that there is something unsatisfying about our knowledge of the mental states of others. It might still seem to be an unjustified leap from the behavior of others to their conscious states. To combat this feeling Wittgenstein points out that we ordinarily take the behavior of others, at least in the most favorable cases, as *conclusive* grounds for asserting that they have certain sensations and feelings. "Just try—in a real case—to doubt someone else's fear or pain" (303). If we try,

in the cases where we have the most favorable behavioral indications, the expression of doubt will turn out to be vacuous. "Yes: one can make the decision to say 'I believe he is in pain' instead of 'he is in pain.' But that is all" (303).

But this will not satisfy the sceptical philosopher. To him this is just a reflection of the uncritical character of our everyday thought. On reflection, he maintains, we can see that this procedure, however confidently we ordinarily employ it, is unjustified; it is just a leap in the dark. It rests on an unjustified assumption that similar behavior is correlated with similar feelings. More radical measures are required to meet this challenge.

Let us set out more explicitly the background of this scepticism. The sceptic is supposing that first I know from my own case what, for example, pain is. I attach meaning to the term by correlating it with a certain kind of sensation that I recurrently discover in my own experience, by using it to *name* that kind of sensation (256 ff.). The problem will then arise as to what ground I can ever have for supposing that other men have the same kind of sensation. Wittgenstein tries to show, or rather suggest, that both steps rest on confusions.

First Wittgenstein attacks the notion that I can develop a "private language" in a very strict sense of "private," that is, one which I *could* not teach to anyone else. It is clear (after Wittgenstein points it out) that the sceptic's picture of the situation presupposes such a language. He supposes that I give meaning to sensation terms by deciding to use each to refer to a certain kind of sensation; I give myself, as it were, a private ostensive definition (258). And if this is the way the words are given meaning, then I cannot explain their meaning to anyone else. For I could do so only by exhibiting to them the sensation named, and if I could do that the problem would never have arisen. Wittgenstein's attack on this idea constitutes one of the most powerful (and most controversial) sections in the book. His main objection is this. Having resolved to apply the word "pain" to sensations such as *this* one, how do I know that I am applying it correctly in the future? Well, I apply it when the present sensation is similar to what I remember the sensation on the original occasion to have been. But how do I know that the memory is correct? There is no possible check. What it comes to is that I apply the word whenever it seems right. There is no distinction between "seems correct" and "is correct." And that means that "correct" has no application.* But we only have a language where there are rules governing the use of expressions and ways of telling whether the rules have been followed in a given case. Hence the supposed private language is no language at all.† And if so, we don't give meaning to sensation words in the way the sceptic suggests. Thus the sceptical argument never gets off the ground. (As often in such cases, Wittgenstein suggests a legitimate use for a term whose mis-

* See sections 258–269, especially the striking remark: "Well, I *believe* that this is the sensation again. Perhaps you *believe* that you believe it" (260). Wittgenstein often tries to reveal the senselessness of a supposition by turning to an analogous case where the senselessness is readily apparent. "My aim is: to teach you to pass from a piece of disguised nonsense to something that is patent nonsense" (464).

† The pertinence of this criticism to the kind of ideal language Russell was trying to develop in "The Philosophy of Logical Atomism" and Carnap in *Der Logische Aufbau der Welt* is obvious. It is very doubtful that Wittgenstein's argument does prove what he intends it to prove. The most careful and detailed study of this issue is Hector N. Castaneda's "The Private Language Argument; Its Logic and Its Consequences."⁹

use in a philosophical context he has just exposed. Thus he suggests that one might use the expression "private language" where one only "appears to understand" (269).

But then how do I give meaning to sensation words as used in first-person reports? Here Wittgenstein recurs to the suggestion that such reports are substitute pain-behavior. I am taught, initially, to say things such as, "I have a pain" in situations where I am exhibiting more primitive pain-behavior; and I will be said to know what the word "pain" means provided my making of such reports tallies roughly* with the occurrence of the more basic pain-behavior, such as groans and grimaces (269). This means that my use of these words in first-person sentences is essentially connected with behavioral criteria, though not in the way they are connected for third-person statements. In the latter I observe and use it as a criterion for the attribution of pain. But in my own case I don't observe my behavior, and I don't use it, or anything else, as a criterion. I don't need any criterion (289-290). I simply utter the sentence; and so long as such utterances tally roughly with other behavioral pain-indications, that settles the matter. This indicates, in the only possible way, how learning and use of sensation-words in first-person reports are based on publicly observable features.

Wittgenstein also has something to say about the sceptic's second step—the question: "How can I know that anyone else has pain, in the private sense of 'pain' in which it means—a sensation like the one I am having now?" Even if the private language could be set up, Wittgenstein argues that this second step could not be made, because the supposition that someone else has the same kind of feeling, *F*, I am having (where I *privately* define *F*) makes no sense. "If one has to imagine someone else's pain on the model of one's own, this is none too easy a thing to do: for I have to imagine pain which I *do not feel* on the model of the pain which I *do feel*" (302). But, we feel inclined to reply, I am just supposing that he has the *same* that I am having. Wittgenstein now sets out to show that this retort depends on a misuse of "same." That gets us no further. It is as if I were to say: "You surely know what 'It is 5 o'clock here' means; so you also know what 'It's 5 o'clock on the sun' means. It means simply that it is just the same time there as it is here when it is 5 o'clock." (A nice example of the reduction of disguised to obvious nonsense.) To fully set out Wittgenstein's point here would take us through a large part of the work. But the basic point is that a given use of the word "same" stands in need of criteria of application as much as a use of any other, more concrete, term; and the fact that we know in other cases what it means to say that *x* is the same as *y* does not guarantee that we know in this context. The use of "same" in a given context is derivative from the use of terms that specify the respect in which sameness is being attributed, for example, "feeling," and hence the former cannot be called on to give sense to the latter. "For that part of the grammar is quite clear to me; that is, that one will say that the stove has the same experience as I, *if* one says: it is in pain and I am in pain" (350).

Wittgenstein often attributes the force of philosophical puzzles to the domi-

* No more than roughly. We often accept someone's report of pain in the absence of any correlated behavioral indications, provided previous correlations have satisfied us that he knows how to use the word. And there is always the possibility of deception.

nance which a certain picture exercises over our thinking. It is easy, he suggests, to let the picture give us a false impression of the use of the expressions involved. It seems that the picture carries its application with it, but in fact it has application only in another sphere, from which it sprang. The picture of the "inner process" is responsible for much of the puzzlement over mental states. It is easy to think of feeling or thinking as something going on in one's head, or "in the soul," something to which only the thinker or feeler has access, and which is necessarily hidden from everyone else. Others can only guess what is going on inside; only he can directly observe it. However, the picture is liable to suggest that mental terms are used in the way terms are used in the sort of situation that gave rise to the picture, for example, terms that describe the contents of a box. Then when we are unable to apply mental terms in this way (are unable to investigate someone else's feelings in the way we do the contents of a box) we fall into perplexity. The picture hides from us the actual workings of language, obscures from us the complicated ways in which the use of mental terms is essentially connected with behavioral criteria (293, 304, 305). See also the way Wittgenstein traces the attachment to "private language" to the picture of ostensive definition, transferred from the teaching of physical object terms. In the mental sphere we are required to take a "sidelong glance" at our feelings, as we repeat a word (274, 294–295). Again the picture suggests a mistaken and oversimplified account of the use of mental terms in first-person sentences.

Once we see the senselessness of the project of applying privately learned mental terms to others, we see that there is no alternative to the ordinary "crude" procedure of taking behavior as a conclusive basis (a "criterion") for the attribution of mental states to others. Once this is settled, we can see a further respect in which the utterance "I feel a pain" is similar to a groan. Both serve as a criterion, or part of a criterion, of pain. In suitable circumstances the sincere utterance, by one who knows English, of "I feel pain" decisively settles his being in pain, just as decisively as an artless groan. And this is as decisive as can be.

The topic of other minds is also well suited to bring out the nonreductive character of Wittgenstein's enterprise. Despite the impression that the foregoing might give, he disavows behaviorism (281, 317). He does not want to deny that there are conscious states (305–306). Nor does he want to deny, for example, that "there is a difference between pain-behavior accompanied by pain and pain-behavior without any pain" (304). "We have only rejected the grammar which tries to force itself on us here" (304). That is, he wants to show that a misuse of mental terms, and the false grammatical models that underlie these misuses, have given rise to gratuitous problems. And in the course of revealing the misuses we bring out the intelligible uses of these expressions and thus safeguard their proper employment.

As we have already mentioned, Wittgenstein had a great impact on those who attended his lectures at Cambridge between 1930 and 1947. Sometimes the ideas presented there fell on fertile ground. One such case was John Wisdom, now Professor at Cambridge, who was a lecturer at Cambridge during Wittgenstein's tenure. Wisdom had been one of the more enthusiastic protagonists of logical atomism. His series of articles entitled "Logical Constructions" probably

represents the farthest development of that philosophy. But under the impact of Wittgenstein's lectures he moved wholeheartedly into the van of "therapeutic positivism." His article "Philosophical Perplexity"¹⁰ was the first full-blown announcement of the new philosophy to the outside world. And a further series of articles on "Other Minds"¹¹ (an epitome of which is reproduced here) provides what is perhaps the most full-scale published exhibition of "therapeutic" techniques.

The most salient feature of Wisdom's philosophical writing is his vivid and uninhibited imaginativeness. He has a marked gift for producing illuminating analogies. In "Other Minds" the mental states of others are successively compared with the boiling water in a kettle, the weight of thistledown, the contents of caskets and closed houses, a fire in a distant location, and so on, and each new comparison throws into relief a different aspect of the matter. But this is just a matter of doing very well something that Wittgenstein was already deliberately and explicitly doing. Wisdom's distinctive contribution to the shape of therapeutic philosophy lies in his emphasis on the positive value of metaphysics. He brings out and emphasizes the fact, at which Wittgenstein had hinted, that metaphysics is not wholly valueless; it is not just a loathsome disease to be extruded as quickly as possible and then banished from memory. As Wisdom states in "Philosophical Perplexity," a metaphysical statement is both false (or meaningless) *and* illuminating; to appreciate it fully, and to deal fully with the puzzlement it reflects, we must bring out both these aspects. This theme is defended at greater length in "Metaphysics and Verification."

Metaphysics is absurd because either it is using terms in their ordinary senses, in which cases it is just obviously false (cf. Moore's attack on "Time Is Not Real," p. 263), or else it is dropping the ordinary senses without putting anything in their places, in which case it is senseless. Wisdom's approach is essentially Wittgenstein's, although even here Wisdom is distinguished by a concern to bring out various nonordinary senses that might be attached to the metaphysical sentence. In "Other Minds," for example, he points out, "We can never know the mind of another" might mean that telepathy is very rare. And in "Philosophical Perplexity" he considers the possibility that "We don't really know that there is cheese on the table," might be a recommendation always to preface every statement about physical objects with "probably."

But such statements are also illuminating. The philosopher falls into such absurdities not because he is stupid but because he has noticed a certain aspect of the logic of a certain kind of statement, and because he is preoccupied with this aspect to the exclusion of others. To say "We don't really know that there is cheese on the table" can be illuminating because it brings out the radical difference between even the most assured statement about physical objects and any report of feelings or sensations. That is, "I may be mistaken" makes sense when prefaced to any physical object statement, but does not make sense prefaced to any report of feelings or sensations. It also brings out the continuity between cases where there really is a physical object before us and cases of hallucination. Again in "Other Minds" Wisdom tells us that the statement "I can never know the mind of another," together with its picture of feelings as the contents of locked caskets, can be illuminating by underlining certain features that are

unique to talk about mental states, for example, “. . . in the fact that there is something that it is not self-contradictory for one man to know directly, while it is self-contradictory for others, we have a characteristic difficulty of the logic of the soul.” (Note that Wittgenstein would boggle at saying that I *know* my feelings directly. Wittgenstein, however, could be pacified by substituting “doubt” for “know directly” and reversing the roles.) Because the logic of mental-state discourse is particularly complicated, one would expect to find a number of complementary paradoxes, each bringing out in its misleading way a different aspect of that logic. Thus the behaviorist dictum that mental states are nothing but patterns of observable behavior (the boiling-water model) serves to underline the fact that my observations of *A*'s behavior, in favorable circumstances, is sufficient for knowing what his feelings are, indeed, is the strongest basis I could *conceivably* have. And both the claim that “*A* is in pain” means the same to *A* and to *B*, and the contradictory claim that “*A* is in pain” means something different to *A* and *B*, serve to bring out an important feature of such utterances.

In bringing out the illuminating aspect of metaphysical paradoxes, Wisdom seeks to translate their insights into “aseptic” language, to move from “provocation” to “pacification.” The technique is to set out in sober detail a description of the logical aspects being hinted at. (Though it must be noted that Wisdom's flair for paradox and penchant for the picturesque make his descriptions less sober than the programme would suggest.) The hope is that by setting out in detail the various logical features of, for example, mental-state statements, we will get the illumination without being misled; we will come to see that mental states are just themselves. They are not *exactly* like contents of boxes, or patterns of behavior, or hypothetical constructs such as electric currents, or imaginative extensions, for example, the weight of thistledown. They have a logic of their own. This uniqueness might be expressed by saying “Feelings are inward states”; but this is liable to either mislead us into assimilations to contents of locked boxes or else degenerate into a bare tautology. We can be saved from both fates by coming to see in detail the ways in which feeling statements are similar to and different from various others. And having seen that, we will no longer be puzzled as to how, if at all, we can know when another is angry.

It might seem from this account that, even for Wisdom, metaphysics is, in the last analysis, something to be gotten rid of. “Provocation” is a necessary stage; by its outrageousness it forces certain points onto our attention. Then the task is to translate these into a detailed description of the logic of various kinds of statements. But Wisdom finds other values in metaphysics. He sometimes suggests that the metaphysical statement contains more illumination than any “aseptic” translation could bring out. For they serve to call attention to pervasive patterns in things which, because of their complexity and subtlety, could not be spelled out in sober terms. In this connection Wisdom draws some striking analogies with the function of psychoanalytic paradoxes such as “Everyone is neurotic to some extent” (see “Philosophy, Metaphysics, and Psycho-Analysis”¹²) and in his challenging essay, “Gods,”¹³ he finds a similar value in religious discourse.

Since World War II Oxford University, formerly a stronghold of idealism and other more traditional philosophies, has come to be dominated by a form of linguistic analysis commonly termed “Oxford philosophy.” The precise extent

to which this movement derives from Wittgenstein is a matter of controversy, but that there was some considerable influence is beyond question. In any event, ignoring the question of actual historical connections, we can view Oxford philosophy as a modification of Wittgenstein's later style of philosophizing. The main modification, to put it succinctly, is in the direction of a more systematic investigation of the use of various terms. We can see this shift in *The Concept of Mind*¹⁴ by Gilbert Ryle, an Oxonian who is closer to Wittgenstein than are many of his colleagues. This book attempts to break down the "Cartesian" pictures of the mind as a "ghost in a machine," and to substitute a more adequate picture, though the outlines of the substitute are not clearly drawn. This is to be accomplished through a detailed examination of such mental-conduct terms as "think," "have his mind on what he is doing," "observe," "imagine," "infer," "angry," "vain," "enjoy," and so on. The general conclusion is that the actual employment of such terms reflects a conception of the mind as consisting of certain aspects of human behavior. The suggestion is made that the Cartesian conception of mind and body as separate interacting substances is based on a series of *misuses* of mental terms or, to use Ryle's favorite expression, a series of "category-mistakes," that is, attempts to treat a term as belonging to some logical category other than the one to which it does belong, for example, treating disposition terms such as "believe," "voluntary," or "angry," as if they denoted private mental *occurrences*. Ryle's supposition is that once this is seen, the temptation to employ the Cartesian framework will disappear. Indeed, it will be seen that the crucial mental terms do not yet have the sort of use (denoting private mental occurrences) that they must have if they are to be used in formulating the Cartesian scheme. Unless the Cartesian can give them that sort of use, his "theory" will be meaningless.

It is clear that this technique is Wittgensteinian, and many of the detailed points could have been made by Wittgenstein. For example, Ryle argues that the notion of imagination as the apprehension of mental pictures can be broken down by realizing that the intelligible employments of "imagine" in such locutions as "I can't imagine what he's doing now," or "Can you imagine him in the army?" have nothing to do with "mental pictures"; that no common predicates apply to physical objects and "mental pictures"; that we don't "see" mental pictures in any ordinary sense of that term; and so on. Again he argues that the hypostatization of sensations into "sense-data" depends on using such terms as "observe," "see," and so on, beyond the bounds of their intelligible employment. No such terms can be applied to sensations themselves.

The difference from Wittgenstein is to be found in the over-all plan of the book. The Introduction begins: "This book offers what may with reservations be described as a theory of the mind."¹⁵ The idea of presenting a "theory of the mind," even with reservations, would have been abhorrent to Wittgenstein. For Wittgenstein it is the occurrence of particular philosophical perplexities that gives a philosophical point to the examination of the uses of particular expressions. Therefore a systematic examination of the use of mental terms, containing sections for moods, feelings, imagination, the intellect, the will, and so on, would be pointless. However, we should not overstate this difference. As we pointed out, Ryle's philosophical motivation is basically Wittgensteinian. This is even clearer in *Dilemmas*. Here Ryle attempts to relieve a number of

"conceptual cramps." Perhaps in the last analysis the only major difference between Ryle and Wittgenstein is in strategy and temper.*

A sharper divergence from the *Philosophical Investigations* can be found in the work of P. F. Strawson who, in his recent book *Individuals*,¹⁷ presses the examination of the ordinary use of expressions into the service of what he calls "descriptive metaphysics." Descriptive metaphysics, Strawson tells us, differs "from what is called philosophical, or logical, or conceptual analysis . . . not . . . in kind of intention, but only in scope and generality. Aiming to lay bare the most general features of our conceptual structure, it can take far less for granted than a more limited and partial conceptual inquiry."¹⁸ In this book Strawson examines the concepts of various kinds of particulars—bodies, sounds, and persons—and the subject-predicate distinction, together with the concepts that cluster around this distinction. It is clear that for Strawson the value of this enterprise does not depend on the prior existence of confusions or perplexities which it could dispel. The enterprise is worth while just because the discovery of "the most general features of our conceptual structure" is an achievement that has value in itself as a contribution to human knowledge. Thus we come back to a conception of philosophical analysis as a discipline that can provide definitely formulable *results*, except that now these results will consist of the depiction of the actual uses of terms, in all their untidy complexity, rather than the construction of ideal language structures, as in logical atomism.¹⁹

This preoccupation with the examination of ordinary use as an end in itself finds its most inclusive spokesman in the late John Austin, who suffered an untimely death in 1959. He is perhaps the most brilliant member of the Oxford group, and most of his ideas were not yet published at the time of his death. Austin, more than any of the others, was fascinated with the subtleties of verbal usage. He was convinced that philosophy would best be served if its practitioners would turn aside for a time from the traditional problems and serve a long (perhaps an indefinitely long) apprenticeship in explicitly setting out the basic concepts that are to be found in our ordinary speech. Austin even envisaged the construction of a Philosophical Dictionary, and he was capable of recommending to his colleagues that in tackling some problem they first go completely through an (ordinary) dictionary and make a list of terms relevant to the problem. During the last years of his life Austin was working out a general theory of linguistic performances; it is to be hoped that this material will soon be published. Like Strawson, Austin does not seem to be sustained in his labors by the Wittgensteinian conviction that *all* philosophical problems stem from linguistic confusions. But it is not clear just what *philosophical* point the examination of the uses of expressions has for Austin. Here is a brief justification of the examination of "ordinary language," "A Plea for Excuses,"²⁰ which he gave in his presidential address to the Aristotelian Society in 1956.

First, words are our tools, and, as a minimum, we should use clean tools: we should know what we mean and what we do not, and we must forearm

* Ryle's reliance on the notion of category-mistake suggests a systematic doctrine of the basic logical categories in terms of which we talk about the world. See also his "Categories."¹⁶ But Ryle never really works this out.

ourselves against the traps that language sets us. Secondly, words are not (except in their own little corner) facts or things: we need therefore to prise them off the world, to hold them apart from and against it, so that we can realise their inadequacies and arbitrarinesses, and can re-look at the world without blinkers. Thirdly, and more hopefully, our common stock of words embodies all the distinctions men have found worth drawing, and the connexions they have found worth making, in the lifetimes of many generations: these surely are likely to be more numerous, more sound, since they have stood up to the long test of the survival of the fittest, and more subtle, at least in all ordinary and reasonably practical matters, than any that you or I are likely to think up in our arm-chairs of an afternoon—the most favoured alternative method.

In the symposium on "Other Minds" we have a good example of Austin's procedure and its sharp differences from that of Wisdom. Notice, in the early part of his essay, the way in which Austin finds all sorts of complexities involved in something Wisdom was taking for granted, namely, the way in which we know that there is a tea party next door. And notice the care with which Austin distinguishes different answers to the question "How do you know?" Here is a virtuoso at work. Wisdom is animated by the conviction that the unique logic of statements about the mental states of others is an elusive thing that can be glimpsed only by successively calling attention to imperfect analogies with other kinds of statements. Austin, on the other hand, proceeds on the assumption that one can cast more light on the problem by making a number of minute points about the uses of various terms involved without, to be sure, venturing onto anything so grandiose as the logic of mental statements in general.

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Metaphysics and Verification

by JOHN WISDOM

"The meaning of a statement is the method of its verification." Some philosophers bring out this principle with confidence and satisfaction; others are utterly opposed to it and cannot understand how anyone can be so wrong-headed as to insist upon what so little reflection shows to be so

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palpably untrue. This conflict is of the greatest importance in philosophy to-day, and it is easy to see why. The Verification Principle is the generalization of a very large class of metaphysical theories, namely all naturalistic, empirical, positivistic theories. While its opposite, which I venture to call the Idiosyncrasy Platitude, is the generalization of all common-sense, realist, transcendental theories. The verification principle is the generalization of such theories as: A cherry is nothing but sensations and possibilities of more; A mind is nothing but a pattern of behaviour; There are no such things as numbers, only numerals, and the laws of logic and mathematics are really rules of grammar; Beauty is nothing but the features in respect of which a thing is beautiful, and the feelings these arouse. According to the idiosyncrasy platitude every sort of statement has its own sort of meaning, and when philosophers ask "What is the analysis of *X* propositions?" the answer is that they are ultimate, that "everything is what it is and not another thing" (Butler, quoted by Moore on the title-page of *Principia Ethica*). This principle is the generalization of theories such as: Ethical propositions involve value predicates and are ultimate; Mathematical propositions are necessary synthetic propositions—an ultimate sort of proposition; Statements about nations are not to be reduced to statements about individuals, they are about a certain sort of concrete universal.

There are not other answers to these metaphysical questions. Consequently most or all metaphysical conflict finds expression in "Shall we or shall we not accept the principle that the meaning of a statement is the method of its verification?" and sometimes "Is the verification principle true?" I do not at all wish to suggest that we cannot get on with metaphysical questions without first dealing with this question. On the contrary, if I were forced to consider either first the verification principle and then other metaphysical theories or first the other theories and then the principle, I should much prefer the latter plan. In fact an intermediate plan is best—first an examination of easier metaphysical and nearly metaphysical questions, then a mention of the verification principle, then an attack upon the more difficult theories, then a more thorough investigation of the verification principle, then a return to the theories. . . .¹

But now suppose someone were to ask "Is the verification principle true?" what would you do? I myself should at once ask for the question

1. On the whole the process of thought has been from the more specific theories to the more general, from the doctrine that analytic propositions are verbal to the doctrine that all necessary propositions are verbal, and from this and such theories as those mentioned above to the verification principle, rather than deductively downwards from it. I admit that in the writings of those supporters of the principle who are positivists (I have in mind such writings as those of Ayer and Schlick) there is to be found ground for Dr. Ewing's accusation that the procedure has been from the principle to the specific theories. Such a procedure, once the verification principle has been recommended by the specific cases, is perfectly satisfactory in a way I shall try to explain. But when the verification principle is regarded as an equation and the "deductions" treated as deductions (calculations) then such a procedure leads to what it has led to—insistence and contra-insistence without end—dead-lock.

to be put in the wider, less answer-fixing form "Shall we accept the verification principle?" For I believe the other form misleads us as to the general nature of the question asked. I believe that this is of the utmost importance because I believe that once its general nature is apparent the question "Is it true or not?" vanishes into insignificance while its important metaphysical merits and demerits will have become apparent in the process.

What I have in mind is this. Many different things are covered by the expressions "accepting a theory," "holding a view." "Shall we become Fascists?" "Are you a Surrealist?" "Is art the production of significant form?" "Does 1 plus 1 make 2?" "Does 378 multiplied by 56 make 21,168 or 21,268?" "Is cancer due to a germ?" "Do you think there is another giant panda in Tibet?" To accept the theory that cancer is due to a germ is different from accepting the theory that it is due to a chemical poison. But this is a difference *in* the theories, not in the sort of theories they are; and it is not the sort of difference I have in mind and call a difference in general nature. A difference in general nature is such a difference as we draw attention to when we say "To become a Fascist is not a purely intellectual process like becoming convinced of the germ theory of cancer," or such a difference as we indicate when we say "A man who says that 1 plus 1 makes 2 does not really make a statement, he registers a decision." We often use the words "not really a statement"² when we wish to draw attention to a difference in general nature, a difference in style of functioning as opposed to difference in subject-matter. People are inclined to say "The statements of fiction are not really statements and so it is silly to ask whether they are true; and even poetical statements such as 'A woman is a foreign land' are not really statements, and aren't really true or false." Now there are differences of this sort *within* the range of statements which are on most occasions unhesitatingly called statements and to which it is quite usual to apply the expressions true or false. When this is so, the differences in general nature are apt to be overlooked. And sometimes overlooking them produces an inappropriateness in what we do when asked whether they are true. We act like one who when asked whether it is true that "the stars are rogues which light the wanderer home" says he doesn't know and looks up books on astronomy.

It is, in my opinion, the neglecting of this sort of difference which has prevented the solving, the *dissolving* in Wittgenstein's³ phrase, of metaphysical problems and of the problem of the verification principle in particular.

2. See A. H. Gardiner, *The Theory of Speech and Language*, p. 185.

3. Wittgenstein has not read this paper, and I warn people against supposing it a closer imitation of him than it is. On the other hand, I can hardly exaggerate the debt I owe to him and how much of the good in this work is his—not only in the treatment of this philosophical difficulty and that, but in the matter of how to do philosophy. I have put a (*W*) against some examples which I owe to him. It must not be assumed that they are used in a way he would approve.

Well, shall we accept the verification principle? What is it to accept it? When people bring out with a dashing air the words "The meaning of a statement is really simply the method of its verification," like one who says "The value of a thing is really simply its power in exchange,"⁴ in what sort of way are they using words? What is the general nature of their theory?

The answer is "It is a metaphysical theory." True, it is a peculiar metaphysical theory as appears from the fact that we are inclined to say: it is not so much a metaphysical theory as a recipe for framing metaphysical theories; it is not a metaphysical theory, it is a mnemonic device for getting from metaphysical theories which have been illuminating in easy metaphysical difficulties to theories which shall work in harder cases, a mnemonic device reminding us how to meet objections to positivistic theories; it is a recommendation to so use "mean" that *S* means the same as *S'* provided they are verified in the same way, where this recommendation is not for the purpose of metaphysically illuminating the use of "meaning" but for another metaphysical purpose, namely the illumination of the use of expressions which on the recommended use of "meaning" will be said to mean the same. It is this "altruism" which makes the verification principle a peculiar metaphysical theory.⁵ But it is the *likeness* of the verification principle to metaphysical theories which I now want to emphasize and explain. It is like not only to such theories as "A mind is really simply a pattern of behaviour," "Goodness is a matter of causing approval," but also to such theories as "We never really know what is going on in another person's mind," "Nothing is really the same from moment to moment," "All words are vague." It is to emphasize this likeness that I call the verification principle of a metaphysical theory. I should be prepared to argue that there is nothing incorrect in calling it this. But that is neither here nor there. What we are concerned with is its metaphysical nature. And to illuminate this I say that it is a sort of metaphysical theory; and for our purpose it does not matter whether it is a sort of metaphysical theory (a)

4. Indeed one might put the verification principle in the form "The meaning of symbols is really simply their power in prediction."

5. The non-altruistic theory connected with it is "The meaning of a statement is a functional feature of it, not an object, like the Hampton Court Maze, of which it is the plan," or "The meaning of a statement is a matter of its uses." The comparison of this with the verification principle would help to deal with many conflicts in which one philosopher says that *S* means the same as *S'* while another says it does not. For often these arise because one is using "meaning" in accordance with the verification principle so that only certain functions count in estimating the meaning of a sentence, while the other is using it so that other functions count. Thus one may count only the conditional predictive functions of a sentence so that "You will be stone deaf to-morrow" means the same to a deaf man as to one who can hear, because the predictions about what each will do *if* given the Seashore tests are the same. But the unconditional predictive power is different; the man who can hear will listen to a noise and say "No more of this." And if the unconditional predictive power is counted in estimating meaning then the sentences do not mean the same to a deaf man as to one who is not. This, worked out, throws much light on the puzzles connected with the soul's survival of the body and the ego-centric predicament.

in the way that a hackney is a sort of horse, or (b) in the way that a motor cycle is, because it is a sort of tireless horse on wheels. If (a) my statement is correct; if (b) it is not. But this correctness is of no importance.⁶ For I make the statement to draw attention to certain likenesses, and whether they suffice or no for the proper application of "metaphysical" does not affect their existence. I say that the verification principle is a metaphysical principle because I want (1) to draw the attention of those who accept it to the deplorably old-fashioned clothes in which it presents itself. Indeed it resembles not only positivistic theories but also the worse transcendental theories by appearing in the disguise either of a scientific discovery removing popular illusion, or of a logical equation (incorrect) from which deductions may be made. No wonder our conservative friends cannot accept it. I want (2) to draw the attention of those who reject it to the fact that because they are taken in by its disguise they fail to recognize the merits which like other metaphysical theories it conceals. Both those who accept it and those who reject it do not realize what they are doing because they do not notice that it is disguised. But metaphysics reveals the hidden, plucks the mask of appearance from the face of reality—and we shall now see what a metaphysical theory really is and thus the general nature of the verification principle.

To say that the verification principle is a sort of metaphysical theory would be extremely illuminating if we had already an adequate grasp of the ultimate nature of metaphysical theories, but lacking this we must go on. It is possible to go on in either of the two following ways: We may examine the nature of the verification principle and thus throw light on the nature of other metaphysical theories, or we may examine the nature of other metaphysical theories and thus throw light on the nature of the verification principle. Let us adopt the latter plan and work from the specific to the general. Then applying our results in a direct examination of the verification principle we shall obtain a review of the whole of metaphysics, because the verification principle is the generalization of one set of answers to metaphysical questions while its opposite is the generalization of the opposing answers.⁷

WHAT IS A METAPHYSICAL THEORY?

1. *The metaphysician is a profound scientist?* Metaphysical theories were at one time presented as super-scientific discoveries. They are still presented

6. Except while it is thought to be; like the doctor's highly coloured medicine or the reserve ratio of the Bank of England. People believe it is important that the reserve ratio should not fall below 9 to 1, say; and because they believe this, it is important.

7. I make no apology for the ambitiousness of this plan. The view is there. I am aware that someone, with more space, time and ability than I have, could make it clearer.

so as to be mistaken for these. Consider the verification principle⁸ itself and Wittgenstein's remark in a lecture, "We are inclined to think that there must be something in common to all games, say, and that this common property is the justification for applying the general term 'game' to the various games."⁹ But this way of presenting metaphysical theories went out of fashion. Something was lost when this happened, because, for one thing, the scientific theory prevented people from regarding metaphysics as analysis, a matter of how words are used. In a sense, like poetry, metaphysics is synthetic because it reveals something which is hidden in a way in which logical definitions never do. It is worth seeing something of why the scientific theory of metaphysics gained such a hold.

It did so because it is so tempting to exhibit the metaphysician as an extra-cautious scientist. A scientist or sophisticated person may doubt whether a rabbit has come from a hat or a table risen from the floor, when an ordinary or unsophisticated person will swear these things have happened. But if the phenomena can be regularly repeated, photographed, seen by all, smelt by dogs, scared by cats, then even the scientist will say "We now know for a fact that these things happen."

There are, however, people who might still refuse to say "We know a rabbit came," "We know the table rose." A madman might refuse, a *Times* correspondent might refuse¹⁰ (for he never says that a certain power has so many troops at such and such a place but always only that this would appear to be so). And a philosopher might refuse. But the philosopher or metaphysician is easily distinguished from the others, not so much by his appearance as by his subsequent talk. He will say, "We don't know that the table moved because we don't know whether there was a table there at all. We don't know that we are not constantly being taken in by an arch-deceiver, a super-illusionist who runs without a hitch a continuous show of prodigious length: so we can never be certain. After all there is no difference in kind between a fleeting glimpse and an hour's scrutiny. And if seeing does not suffice, does seeing and touching? or seeing, touching and smelling? Are 5 independent witnesses required to prevent talk of infectious hallucination or would 237 be necessary? Further observation may increase probability but probability is not knowledge. Knowledge man never obtains; not from the time he reaches for a golden ball and learns it's the moon till when he dreams of Paradise and wakes in Camden Town."

8. Dr. Ewing actually takes the verification principle to be an empirical statement. *Mind*, Vol. XLVI, No. 183, p. 349.

9. The great value I attach to what Wittgenstein says here, appears later, pp. 536-538.

10. If only we had noticed how much liker is the philosopher's doubt to that of *The Times* correspondent than to that of the madman! *The Times* correspondent is as energetic as anyone in building armaments, and the philosopher as confident as anyone when seating himself on a table. Hence Wittgenstein's expression "pseudo-doubt."

Again, a doctor may be sceptical of the value of a new drug although you tell him ten people took it and soon improved. He says that perhaps they all changed their diets in a certain way when they took it, or that perhaps it was suggestion; or he says that with so few cases it may have been a coincidence. But if thousands of people, some with faith and some without, some from cold climates, some from warm, some . . . all improve then even a very scientific doctor will admit the value of the drug. It is only the philosopher who says "But it *may* still be coincidence. Where do you draw the line¹¹ and say, 'Now we know it was not coincidence, now we know that quinine has an effect'?"

Again, consider the series of questions: "Do flowers feel?" "Does the amoeba feel?" "Does a worm feel?" "Does a dog feel?" Here the ordinary man says "Yes," and the scientist may say "No." The philosopher proceeds, "Does a baby feel?" "Does your friend feel?" and he says that we do not know that they do. Then there is the series which begins with the policeman asking whether you are sure that this is the man you saw hanging round the garage, and ends with the philosopher asking whether you are sure that the woman who comes down to breakfast each morning looking like your wife is always the same woman. It is all this sort of thing which leads people to think of the philosopher as a super-scientist. Nor is it only the epistemological metaphysical theories which are associated in this way with science. For through the epistemological theories the ontological theories also are associated with it. Instead of asking "Do we know that there are Siamese cats?" we may ask "Are there Siamese cats?" And instead of asking "Are there Siamese cats?" and answering "There are none really, only dogs which look like cats," we may, because there are such appearances of Siamese cats as there are, ask instead "Are Siamese cats really cats?" or "What are Siamese cats really?" Similarly, there being such appearances of chairs as there are, instead of asking "Are there chairs?" and answering "There are none, only families of sense-data," we may ask "What *are* chairs really?" and answer "They are really families of sense-data." There is an intermediate form of words, namely, "There are cats but only in a Pickwickian sense," "There are chairs but only in a Pickwickian sense." Propositions about cats and chairs will then be said to be phenomenally true.

2. *Logical Theory of Metaphysics. The metaphysician is a profound logician engaged on an a priori science of definitions?* This new formulation "What is a chair?" was of the utmost importance. For though one may use this form of words "What is an X?" in asking for fresh factual information, like the wife of an instrument-maker who, though she knows anemometers well by sight, may suddenly ask "Jack, what *is* an anemometer?" one may also use it in a very different way, the way Socrates explained he was using it when he asked "What is virtue?" From his explanation it is clear

11. This phrase is a common metaphysical weapon of great power.

that he was asking for a logical definition.¹² Consequently if, in order to avoid the hint of ridiculousness in the question "Are there such things as chairs?" we ask "What are chairs?" then we use a form of words which at once suggests an analogy between the philosopher and, not the scientist, but the logician.

Now as science grew and people saw better how it is based on observation and experiment there grew a suspicion of anyone who professed to have obtained new factual information by anything but empirical methods. There were sneers at the philosophers who were represented as employing arm-chair, *a priori* methods. The deplorable affair of Hegel and the planets was not forgotten. Besides, philosophers could not agree, were in fact in a dead-lock—at each other's throats.

To this situation came Moore and Russell, Moore from a study of Plato and Aristotle, and Russell from the world of logic and mathematics. They revolutionized philosophy for many of us by reinterpreting the philosopher's "What is an *X*?" as a request for logical analysis. This is too well known to need support by much quotation. Russell wrote ". . . every philosophical problem, when it is subjected to the necessary analysis and purification, is found either to be not really philosophical at all, or else to be, in the sense in which we are using the word, logical."¹³ Moore writes, "I am not at all sceptical as to the truth of such propositions as 'the earth has existed for many years past' . . . but I am very sceptical as to what, in certain respects, the correct *analysis* of such propositions is."¹⁴

This theory of metaphysics provided a response to the metaphysical challenge "If a metaphysical theory isn't empirical, what is it?" (How often is this club used to induce us to accept some simplifying lie.) Like all good big ideas it seemed the simple, natural thing to say, the moment someone said it. And it proved itself by breaking up the dead-lock. The theories of descriptions and numbers, and the theory of classes, were all pieces of logical analysis and they worked like charms on many hitherto incurable philosophical complaints. The proof of the unreality of space, the ontological argument for the existence of God and the extra entities in the universes of discourse all went up in smoke, though from the fictional entities there lingered still a peculiar smell. Thus these analyses showed themselves to be what philosophers needed, what they were really asking for. But there were little clouds upon the horizon. (1) Unless the positivistic analyses were correct the epistemological difficulties "How do we know that chairs and other minds and value predicates exist?" could be answered only by Intuitionism (special

12. There are reasons for saying that he was really wanting a metaphysical "definition."

13. *Our Knowledge of the External World*, p. 33.

14. *British Contemporary Philosophy*, Vol. II, p. 216. Mention should be made of the careful analytic work of Sidgwick, and of McTaggart's insistence on getting the meaning of a question clear, in spite of the fact that McTaggart defended to the last the possibility of an *a priori* investigation of the nature of existence.

way of knowing), Scepticism (we don't know), Dogmatism (we know somehow—never mind how). (2) Unfortunately in the most fundamental cases the positivistic analyses could never be got both complete and correct. This encouraged people to say what Broad and sometimes Russell were inclined to say, namely, that the philosopher gave the analysis not of all the plain man does say but of all he has any right to say.¹⁵

We shall see how these points are connected with the nature and fundamental defects of the analysis theory.

3. *The metaphysician looks for the definition of the indefinable.*

3.1. *The meaning of this statement.* To say that metaphysics is analysis is unsatisfying in certain respects. To begin with, people are apt to ask, "And what is analysis?" Just as when James says that an emotion is nothing but a complex of sensations¹⁶ people are apt to ask, "And what is a sensation?" (then the fun begins). Again, "A nation is nothing but the individuals which make it up" may lead to the question "What are individuals?"

These responses are hardly complaints, and are therefore to be contrasted with those prompted by "A nation is a society of a certain sort," "An instinct is an unacquired disposition involving consciousness." These definitions are apt to make people say, "But that is *just* what I want to know. What is a society? What is a disposition?" Unlike these, the question "And what is analysis?" is not a complaint that we have not provided the right stuff, but a request for the same again. It can be called a complaint against incompleteness if you like, but if so, it must be distinguished from the complaints (a) of another sort of incompleteness and (b) of incorrectness, to which we must now attend.

For "Metaphysics is analysis" is apt, in the second place, to provoke the challenge "Not all analysis is metaphysics. Now *which* sort is?"

We are reminded at once of how people respond to "Statements about nations are just statements about individuals." They are apt to say "Ah! Now which statements about individuals are about nations? Complicated ones, no doubt. But be more specific. Take any statement about a nation and tell us which statements about individuals make it up."

Now there are two reasons for which people make this challenge. (1) They may make it because they hold that statements about nations are not statements about individuals nor compounds of such statements, or are so only in a very extended sense. (2) They may be satisfied that nation-statements are individual-statements, perhaps in a somewhat stretched sense, but wish to ask what distinguishes those individual-statements which are nation-statements from those which are not—like one who is not troubled about the sort of entity a cow is, but feels he doesn't know what the essence

15. Russell said this with regret, but Broad I think always felt that the plain man had something in the way of a surprise coming to him from the philosopher; and he was right, though not as to its nature.

16. He should have said "of actual and possible sensations" on the lines of this sort of answer to "What is a chair?"

of the distinction between cows and other things of the same sort is, because he feels sure this is a matter of shape or colour or upper incisors or something, while yet nothing of this seems *essential*.

But let us attend first to the matter of the genus or general nature of metaphysics. I want to contend that metaphysics is not analysis or, if you like, that it is so only in a dangerously extended sense. The extension has been illuminating in the past, but it *is* an extension and as such it may, and in fact now does, mislead.

Questions of this sort as to the general nature of metaphysics, analysis, mathematics, ethics, poetry, fiction have been made more difficult by defining these subjects as respectively classes of metaphysical, analytic, fictional, etc., propositions, and then asking to what genus these classes of proposition belong. It is better to describe mathematics, analysis, metaphysics, poetry as sorts of games played with words as pieces, the usual significance of which must of course be understood by the players, and then to define metaphysical, analytic, and fictional questions and sentences by reference to the purposes they serve in the game.

Now I contend that metaphysics is not analysis, and that metaphysical questions are not requests for analyses, even though they are expressed in forms of words which may be used in the analysis game to ask for analyses, and that metaphysical answers are not analyses though they may be forms of words used in the analytic game to state analyses. Of course one could say instead that the questions are requests for analyses and the answers analyses, only all with a hidden purpose, just as one may say that "What is the meaning of good?" when asked by a philosopher, is a verbal question but with a hidden purpose, instead of saying that it is not really a verbal question. To say that analytic statements are verbal is useful if one wishes to get rid of the idea that statements about dogs differ from statements about cats or statements about colour differ from statements about shape and size. One might express this by saying that to say that analytic propositions are verbal is useful in getting rid of the idea that they differ from ones that are not analytic in being about a new species of thing or "in subject-matter." I shall use the last expression although it involves deciding arbitrarily not to describe the sort of difference there is between analytic and verbal statements as a difference in subject-matter. The excuse for doing this is that for every statement about abstract entities—propositions, characteristics—there is a verbal statement which makes the same factual claims though its meaning is different. I have explained this point elsewhere,¹⁷ but it is of such importance that I must explain it briefly here.

If I say that "good" means "approved by the majority," in so far as I make any factual claims they are justified by what people would say, that is,

17. *Psyche*, Vol. XIII, pp. 166–9; *Mind*, Vol. XLII, pp. 195–6. And Ayer explains this clearly: *Aristotelian Society*, Supp. Vol. XVI, p. 167. The extraordinary thing is that he does not see that he has answered his own question of p. 172, line 1.

are verbal; but my purpose, or primary intention, in saying so, is not verbal. Suppose a Chinaman is decoding an English message, and does not know the meaning either of "vixen" or of "female fox," but says after investigation, "'vixen' means the same as 'female fox.'" He says this though he knows his hearer also does not know the meaning of either expression. Suppose now Smith says "'vixen' means 'female fox,'" because he believes his hearer knows the meaning of "female fox" but not of "vixen." Suppose now someone says, "A vixen may be defined as a female fox." The factual claims involved in the statements are the same. But the purposes they serve are very different, and this makes us speak differently about their meanings. A hearer understands the Chinaman's statement though he understands neither "vixen" nor "female fox"; but only if he understands one of the two does he understand Smith, and only if he understands the meaning of both does he understand or, if you like, fully understand the philosopher. Hence statements about propositions and characteristics such as "He asserted the proposition that Africa is hot," "She is chic," can be turned into statements about words "He uttered the sentence 'Africa is hot,'" "She is what the French call 'chic,'" if, and only if the verbal statements are so used that we say that a man understands them only if he understands not merely the expressions "the sentence 'Africa is hot'" and "what the French call 'chic'" but also understands the sentence "Africa is hot" and the word "chic."¹⁸

It follows that to say that analytic statements, such as "Phoenixes are birds which renew themselves from their own ashes," are verbal statements, emphasizes their likeness to the statements of translators and decoders and their unlikeness to scientific statements such as "Phoenixes do not drink before sunset." At the same time it slurs over a serious unlikeness between analytic statements and those of translators and decoders, an unlikeness which is emphasized if one insists on the platitude that they are not verbal, but are of their own peculiar sort.

Now I wish to emphasize the unlikeness between metaphysical questions and answers and analytic ones. So I say that metaphysics is not analysis, metaphysical questions not requests for analyses, and metaphysical answers not analytic definitions, or, if you like, not *merely* analytic (compare "not merely verbal").

Of course if "Metaphysics is a sort of analysis" is taken like "A motor cycle is a sort of horse though it can neither gallop nor jump" then it is not

18. (a) To deny this results in the extreme paradox "All statements are verbal."
- (b) This is part of the explanation of the necessity of necessary statements. For such statements connect abstract things and are therefore purely verbal in a way in which "He asserted Africa is hot" is not; that is, they are purely about the use of the expressions they connect. And what they assert must be known to the hearer if he understands them. Hence, if he denies them, the speaker says the hearer does not understand. This is characteristic of necessary statements. Logically necessary statements are checked by the actual usage of language and to this extent may be called true and false. Metaphysically necessary statements only have *excuses* in the actual use of language and so can only be called "excusable" and "inexcusable."

incorrect—how can such statements be incorrect?—and it is illuminating, but it is dangerously apt to mislead. It is apt, for example, to mislead people into rejecting statements of the sort “Nation-statements are individual-statements,” “Analytic statements are verbal,” as not to the purpose, because they are wrong in analysis. It is apt, for example, to make people reject such a statement as “Metaphysical questions are analytic questions” as not to the purpose in metaphysics, because it is wrong in analysis.

I do not reject “Metaphysics is a sort of analysis” as not to the purpose in metaphysics because it is incorrect in analysis, but I bring out its dangers in metaphysics by bringing out its incorrectness in analysis.

It will be noticed that one who asserts as an analytic proposition that metaphysics is analysis cannot defend it on the lines I have just indicated.¹⁹ He will have to defend it on the lines that it is correct as an analysis. In disputing this I shall be doing what I want to do, bringing out how it misleads as metaphysics.

If the metaphysician really wants analysis it is a curious thing that nearly every formula for giving definitions which is submitted to him he rejects, either on the ground that the definitions it yields are not sufficiently profound to be called metaphysical, or on the ground that the definitions it yields are not definitions because they are incorrect.

If, when a metaphysician asked “What is a penny?” we were to reply “A coin, English, etc.,” that would be no good to him. Even if we said “A material thing which, etc.,” we should only have succeeded in stating the essence of the problem which he put in the misleadingly specific form “What is a penny?” On the other hand, if we reply: “Pennies are just bundles of sensations” or, in order to avoid tiresome objections, “Statements about pennies are just statements about sensations,” then the metaphysician complains that there are no statements about sensations which mean the same as any statement about a material thing.

The metaphysician is like a man who, meeting an old friend in disguise, asks us “Who is this?” and then if we merely sponge the old friend’s face and straighten his tie, says “Still I don’t know who it is,” while if we pull off the false beard and the wig, he says “But this is not now the same man. The man I asked you about had a beard and a wig.” Nothing satisfies him. Or rather—and the change is important—nothing in the way of analysis satisfies him.

Now I contend that this is because it is not what he wants. When a man tells me he would love to ride a horse but, no matter what animal I offer him, says “Not *that* one,” then I think he does not really want to ride. Especially if, when offered a motor cycle, he takes it with alacrity. Of course, you may say if you like that I did not find the right horse. Or you may say that he wanted a perfect horse and then explain that a perfect horse is im-

19. Unless he maintains that “What is the ultimate nature of a metaphysical question?” unlike all other questions of this form, is not a request for analysis.

possible, since, unless its speed was unlimited, we might at any time wish it could go faster, while if it could always go faster when we wanted, then, like an aeroplane, it would shrivel space and thus be unable to conquer distance.

And this *is* what is said about the metaphysician—that we have not found the analysis of what he wants analysed, or, in other cases, that what he wants analysed is ultimate, unanalysable. I am content to accept the latter statement but not the former.

Instead of saying "The man who said he wanted a horse really wanted a motor cycle" one might say "He wanted a horse but *needed* a motor cycle" or "What he wanted *primarily*, apart from his wrong idea about what he wanted, was a motor cycle." Now many metaphysicians, nowadays, put their requests in the form "What is the analysis of *X* propositions?" and because of this we may feel it best to say that they want analysis but need something else. On the other hand, in view of the fact that other people with no axe to grind in the way of a theory of metaphysics ask very like questions in the older form "What is the ultimate nature of so and so?" and are then satisfied by judicious *description*, we may feel it best to say "What metaphysicians want, or really want, is not definition but description."

3.2. *Proof that the metaphysician looks for the definition of the indefinable.* The metaphysician's request is the limit to which a series of requests for analysis approaches. Now requests for analysis approach nearer and nearer to requests for the impossible. This appears if we consider for a moment what has sometimes been called "the paradox of analysis."

It is sometimes claimed that analysis is impossible for the following reasons: To analyse *p* is to translate the sentence "*p*" into another which expresses a proposition of different structure, form and elements from *p*. But any proposition which has not the form and elements of *p* is not the same proposition as *p*. Hence any sentence which expresses a proposition having a structure different from *p* does not express the same proposition as "*p*," i.e. does not mean the same as "*p*," i.e. is not a translation of "*p*" and hence does not provide an analysis of *p*.

Now of course analysis is possible. It is done. Universal affirmative propositions are not ultimate; they can be analysed into propositions which are not universal affirmatives. But a consideration of the paradox of analysis enables us to see on what the possibility of analysis depends. Universal affirmatives are analysable because we do *not* mean by "universal affirmatives" "the propositions expressed by English sentences of the sort 'All *S* is *P*' or *any* which mean the same, no matter what devices they employ." True, we do not mean by "universal affirmatives" "those propositions which are expressed by *English* sentences of the form 'All *S* is *P*.'" They can be asserted in French. But we do mean by "universal affirmatives" those propositions which are expressed by sentences using devices having a use like "All" or "Every" or "Tous les." Consequently we do *not* say of a man who says "There were

lions there, but there was not one which attempted to harm him," that he asserts a universal affirmative proposition. At the same time in the sense of "same proposition" required by "mean the same" in the sense of "mean the same" required by "translation of," we should say of a man who says "There were lions there, but there was not one that attempted to harm him," that he asserts the same proposition as one who says "All the lions there made no attempt to harm him." In general: *X* propositions are analysable into non-*X* propositions, only if the differences we require between two sentences in order to say that one expresses an *X* proposition and the other does not, do not conflict with the resemblances we require in order to say that two sentences mean the same.

We are tempted on the one hand to use "mean the same" so narrowly that if two sentences, though they convey the same information, function otherwise very differently, e.g. express propositions of different form, then they do not mean the same. Directly we do this, it becomes impossible to analyse propositions of one form into propositions of another.

And we are continually tempted to define "*X* propositions" (the ones we want analysed), as "those which are often dressed in English sentences which mean the same." Directly we do this it becomes impossible to analyse *X* propositions into non-*X* propositions.

We do not always yield to these temptations, so analysis is possible. Thus if I mean by "a fictional proposition,"²⁰ such a proposition as you or I now make if we assert that Mrs. Bardell had fainted in Mr. Pickwick's arms, then one can analyse fictional propositions into non-fictional as follows: If *A* asserts of some author's character, *S*, that *S* had a property *P* then *X* means "In the accepted text it is written that *S* had *P*."

But it easily happens that we yield to the temptations without knowing it and then analysis becomes impossible without our knowing it. Thus suppose I mean by a fictional proposition "such a proposition as an author expresses when he says of one of his characters '*S* had *P*.'" Now here any sentence which could be said to mean the same as the one the author used would have to fulfil the same sort of imaginative, non-informative purpose; and "fictional proposition" in the sense now in question is so used that any sentence used with the same sort of imaginative purpose would be said to be a fictional proposition. Hence it is impossible to analyse fictional propositions in this sense. That is, in this sense fictional propositions are ultimate.

Now it is my contention that this happens again and again in metaphysics: that is, that "*X* proposition" is used so widely and "mean the same" so narrowly, that the only correct answer to the question "Are *X* propositions analysable into others?" is that they are not. This is frequently obscured by the fact that the expression "*X* proposition" has a narrower use than that given it by the metaphysician with whom we are speaking,

20. See Ryle, Braithwaite and Moore, *Arts. Soc.*, Suppl. Vol. XII, pp. 18-70.

while nevertheless, that narrower use is so profound that definition of it is fairly called philosophical and even metaphysical.

These claims can be supported only by looking at metaphysical questions and answers and the reactions people have made to these. Let us now do this.

3.21. *Formal puzzles: (a) Numerical propositions.* People have asked "What is the nature of numerical propositions?" meaning not mathematical propositions but such propositions as "Two men were murdered, three women drowned." Russell²¹ offers the analysis: "Not three people are interested in mathematical logic" may be expressed in the form: "If x is interested in mathematical logic, and also y is interested, and also z is interested, then x is identical with y , or x is identical with z , or y is identical with z ." And this satisfies some people. Their being satisfied does not prove that their question was not profound enough to be called philosophical or even if you like metaphysical. But I do want to claim that some who use the same form of words would not be satisfied, would say that they were asking a more general question involving a wider use of "numerical proposition." They would say that Russell's new formulation, which comes to "Something is interested in mathematical logic and something not identical with it is interested in mathematical logic,"²² still expresses a numerical proposition, and thus does not provide an analysis of numerical propositions into non-numerical propositions but only sponges their faces.

We should say of a man who was dissatisfied with a definition of instinct as a disposition that he was concerned with a more general, more profound, more really metaphysical question than one who was satisfied with it. Both used the same form of words, "What is an instinct?" but the one who is dissatisfied with the answer in terms of dispositions was really only using this form of words to ask a deeper, more metaphysical question, "What is a disposition?" And I want to claim that we should say the same of the man who was dissatisfied with Russell's definition.

I am well aware that Russell's definition of numerical propositions has important claims to the title "philosophical" and even "metaphysical" which the definition of "instinct" in terms of "disposition" has not, and that therefore the question to which Russell's definition is an answer has such special claims. My point is that beyond Russell's question is another which has still better claims. For there are and have been people dissatisfied, in the special way indicated, with Russell's definition, saying that it was not sufficiently profound. What did they want?

Joseph, in discussion some fifteen years ago, said that Russell's definition was circular in that his new definition involved the notion of plurality and was thus in essence still a numerical proposition. It was said at that time

21. *Our Knowledge of the External World*, p. 207.

22. This is a slip. The latter expression means "At least two people are interested in mathematical logic." J. W., 1952.

that he had not grasped the point of Russell's definition and, as I have said, I do not wish to deny the logical, even the philosophical value of Russell's definition. It removed the impression that numbers were a special kind of quality applicable to groups. On the other hand those who derided what Joseph said were metaphysically blind, in that they could not feel the inclination to ask his wider, profounder question.

Let us look at this profounder question carefully. It differs from Russell's not merely in that some answers which would satisfy Russell would not satisfy the profound metaphysician, but in that no answer or, rather, no answer in terms of a definition would satisfy the metaphysician who asks it. For he asks that we should analyse numerical propositions into non-numerical propositions. And yet it soon comes out that for him, if a proposition involves the notion of plurality, it is a numerical proposition, and that a proposition involves the notion of plurality if it involves the notion *other than*. Now no proposition involving the notion *other than* can be analysed into one which does not. Further, if we take any numerical proposition p_1 it will, as everyone admits, involve plurality and thus the notion *other than*. Hence if p_1 is analysed into p_2 , p_2 will involve the notion *other than* and thus plurality; and thus *on the metaphysician's use of* "numerical proposition" p_2 will again be numerical. Hence the class of propositions to which the metaphysician refers by "numerical" cannot be analysed into propositions not in that class. Which is what Joseph wished to show.

How natural it is to proceed as the metaphysician does may be brought out more plainly as follows: The metaphysician asks that numerical propositions shall be defined in terms of non-numerical propositions, not as those which are expressed by English sentences of the sort, "Two S are P ," "Three S are P ," etc., nor as those which are expressed by these English sentences and their French, German, etc., translations, but as those expressed by the English sentences and *any* sentences, whatever devices they may involve, which stand for the same propositions, mean the same. Nothing could be more natural, but the result is a self-contradictory request. For to analyse numerical propositions is to translate sentences which stand for numerical propositions into others which do not. But if a new sentence, S_2 , is a translation of one, S_1 , which stands for a numerical proposition, then S_2 will mean the same as S_1 and therefore, with the metaphysician's use of "numerical proposition," the proposition it expresses will not be non-numerical. Hence with this use of "numerical proposition" numerical propositions are ultimate. I prefer to put this by saying that the description "analysed numerical propositions into others" describes no process, or the description "translated sentences expressing numerical propositions into sentences which do not" describes no process. The descriptions describe no process not merely in the sense in which "completed the old course at St. Andrews in '25" describes no process which has been or will be carried out, but in the sense in which "squared the circle," "found a perfect movable pulley in which

W did not balance $\frac{1}{2}W$," "found a leopard without spots and a purple Union Jack" describe no process.

It might be thought that there is a more drastic answer which would help the metaphysician. If a child were to ask us "What does 'Two men were murdered' mean?" part of what we should do to explain would be to say "Well, if Alf and Bill were murdered, or Charles and David, then two men would be murdered." And then, anxious to prevent the idea that only Alf and Bill, Charles and David, would count, we might add "and so on." So we might suggest that "Two men were murdered" means "Either Alf and David were murdered or Charles and Bill were murdered, or . . . and so on." The metaphysician would say: "When you say 'and so on' is this short for a list you could put down? Then your translation does not mean the same as the original. But if it means 'or any other man and another' then your translation is only another form of Russell's, and you have again given us a numerical proposition involving the notion *other than*." Or the metaphysician may object that the "specimen" facts, e.g. "Alf and Bill were murdered," themselves involve plurality.

Thus once more it appears that any sentence which means the same as the original will again be said to express a numerical proposition. No wonder that numerical propositions are ultimate.

3.21. *Formal puzzles: (b) Generality.* It is the same with general propositions such as "Something moved." People complain that there is no finite list of propositions of the sort "Smith moved" which disjunctively combined mean "Something moved." We may say if we like that there is an infinite list which does, and this brings out an important feature of the relationship between "Smith moved" and "Something moved." This feature we can also bring out by saying "The *more* specific propositions we put in our list, the *nearer* does a disjunction of them come to meaning the same as the general proposition." But when we say that an *infinite* disjunction would give the meaning, we mean not only the fact just mentioned, but also the fact that however long the list is it will *not* give the meaning unless we call a list with "and so on" at the end a definition.

Or again people complain that the "specimen" facts, e.g. "Smith was murdered," again involve generality because "Smith" is a disguised descriptive phrase. The suggestion is that all would be well if we could analyse these into statements about our present sense data such as "This is red."

If these explanations are not definitions then there is no definition of general propositions into non-general.

It may now be said "The conclusion you have reached about numerical and general propositions, and incidentally about fictional propositions, is the perfectly familiar but utterly unhelpful one that they are ultimate."

I am delighted to welcome this criticism. This is precisely what I want to say myself, that this answer "Numerical propositions are ultimate" is quite inadequate, leaves the philosopher feeling that somehow there *was* some-

thing he wanted which he has been denied. As I have explained, I want to go further and generalize and say that whenever in answer to a metaphysician's question "What are *X* propositions?" the answer is given "They are ultimate" then that answer is (1) correct, but (2) inadequate.

3.22. *Category puzzles: (a) Time.* Let us now take an example from another class of metaphysical questions. These arise, not from the "queerness" of the form of the class of propositions which is felt to be queer, but because of the queerness of the category of what they are about. These are apt to present themselves in the form "What is *X*?" "What are *X*'s?" where "*X*" is a name for the puzzling category, or a name for a species of that category. We have for example, "What are characteristics? What are numbers? What are abstract, necessary propositions about?" and we have "What are chairs and tables? What are material things?" "What is a nation? Is it something over and above the individuals of that nation?" "What is Time?"

Suppose we offer an answer to the last on the lines suggested by Moore.²³ We say, "Well, when we speak about Time, what are we talking about? Such facts as this—that lunch is over, supper to come, that Smith's anger is past and so on. Let us call such facts 'temporal facts.' then 'Time is unreal' can be *translated into the concrete* (Moore's phrase) by 'There are no temporal facts.'" When we read this, we draw a breath of relief. This is the stuff. With this translation into the concrete, we get "the cash value" (Broad), the predictive power, of the statement "Time is unreal." What a contrast to the answer "Time is an abstract entity, super-sensible, having a sort of existence all its own." For the latter answer only tells us that time is not brown or yellow, not big or little, not to be found in the bathroom, and like Space only different. Such an answer only emphasizes what ordinary language suggests that, besides the facts that lunch is over and his anger past, there is the fact that Time is real. True, Moore did not *find* a definition, but he showed how it was a mere accident of language that we could not provide a definition and thus remove an uneasy feeling about Time, just as we did when we had the uneasy feeling that though the class of all men is not to be identified with its members, yet there were not in addition to the facts about men, e.g. that men exist, that all are mortal, facts about the class of men, e.g. that it exists, has members, has members which are mortal.

We may say here that Moore meets a philosophical request, even, if you like, a metaphysical request, not indeed by finding but by creating an analytic definition.

I do not wish to deny this any more than I wish to deny that Russell did the same with his definition of number. They both translated sentences which trouble us into others which do not.

But of course there will be people dissatisfied with this answer. They fall into two very different classes. In the first place, some will say "What

23. *Philosophical Studies*, p. 209.

is meant by 'Time is real' is different from what is meant by 'Either lunch is over, or my supper yet to come, or his anger is past, or something of that sort (i.e. and so on).' What I have in mind when I say 'Time is unreal,' is very different from what I have in mind if I say 'Either lunch is over, or etc.' And yet these same people, some of them, will not be satisfied by any definition which does not put "Time is unreal" in terms of individual events. So they reject every definition either on the ground that it is incorrect or on the ground that it is not sufficiently profound. The nature of this difficulty in metaphysics and the light it throws upon its nature will appear later.

In the second place, there are people who will say that even the definition in terms of individual events or temporal facts is not sufficiently profound; they ask that the definition should be taken further. And if we say "By temporal facts we mean such facts as 'Smith's anger is past' and so on" they complain (a) against the "specimen" fact as again involving time, or (b) against the phrase "and so on." It is soon clear that there is nothing to be done for them with regard to (a). We may try saying "His anger is past" means "He was angry and is not."²⁴ But it is a hopeless game. The reply will be that "He was angry" involves Time again. And of course it involves it if any sentence using a verb with a tense involves Time. And it is now apparent that this is how the metaphysician used "involves Time." He cannot translate sentences which work like the ones with tenses into sentences involving only a timeless "is" such as "Red is a colour." But this is what he wants. Nothing short of it will do, nothing else will be a reduction of temporal facts to non-temporal. No new language will help. Suppose we invent a new language with no time-indicating words such as "was," "will be" and no time-indicating endings such as "-ed." Now the new sentences, if they are to provide translations, must do the work the old did; so there must be differences between those which correspond to the old "was"-sentences and those which correspond to the old "will be"-sentences. We might put them in different coloured inks (compare Ramsey's writing negatives as positives upside down). But then the new sentences would surely again express temporal propositions.

I am well aware that there is nothing novel in the conclusion that temporal propositions are unanalysable, and that this unanalysability is not a matter of our being unable to do or find the analysis but of the nature of the facts. Prof. Broad supports far more fully and carefully than I have done this very conclusion about temporal facts.²⁵

I am so sorry that he advances his conclusion *tentatively*. He says "And so, *prima facie*, the temporal copula has not been analysed away. Of course it may be answered that this objection depends simply on defects in the

24. Broad, *Examination of McTaggart*, p. 316; Wisdom, *Proc. Aris. Soc.*, Vol. XXIX (1928-9), p. 92.

25. *Examination of McTaggart's Philosophy*, Vol. II, Part I, Chap. XXXV, especially pp. 271, 272, 304-7, 314, 315.

language that we speak. It may be so. But I am more inclined to think . . .” What is he in doubt about? He knows our own language well. His own examination has shown that there are no sentences in English which we should say do not stand for temporal propositions which are nevertheless such that we can translate those which do into them. We may bet anything that the same is true of French and German. Is Broad asking whether, if we invented an entirely new and very different system of symbols into which we could translate temporal sentences, we should be satisfied—should be willing to speak of having translated sentences which express temporal propositions into sentences which do not? There may be people who would be satisfied by this. Sometimes metaphysical difficulty is removed by inventing a word when it would not have been removed without such an invention. We cannot say that Ramsey’s writing negatives as positives upside down was useless. On the contrary it distilled the problem of negation into such purity that it vanished; but it did not achieve its result by analysing negative sentences into non-negative sentences. And this is what signifying tense by colour would do. After the removal of “not” it could not be complained that the negative sentence was misleading in its shape. We may doubt with regard to a particular person whether he would be satisfied if such a new language were introduced, just as some might be satisfied by a definition of “two” in the symbolism of *Principia Mathematica*, while they would be dissatisfied with any in English. But we also know that there are many who would say that such people would be wrong to be satisfied.

By a study of how these difficult people use “temporal sentence” we come to learn that they mean what anyone reading this will now be inclined to mean by it, namely any sentence conveying temporal information. By a study of how these metaphysically-minded people react to proffered definitions we can see that no peculiarity in the way the sentence performs its work, the images it raises, the feelings it arouses, will prevent them calling it a temporal sentence provided its cash value is the sort of cash value which “He was angry” has, i.e. provided it is a translation of sentences with “was” and “will” and “is now” in them, used as they are now used. We know, then, that they so use “temporal sentence” that “a translation of temporal sentences into ones which are not temporal” is a self-contradictory description. Suppose a man says he cannot find a perfect movable pulley in which W does not balance $\frac{1}{2}W$. By prolonged search I find a golden pulley so smooth that the highest-powered microscopes detect no deficiency in its surface, on which, nevertheless, W does not balance $\frac{1}{2}W$. But he explains that by “perfect” he wished to exclude so dazzling a material as gold. From the fairies I obtain a gold which does not dazzle or from the angels a pulley in blue. But now he complains of the microscope, says that a larger one would reveal defects even if the pulley has been sent down from heaven. But even a heavenly microscope does not convince him. God no doubt possesses a microscope of His own which would reveal what no other does, namely, the

defect which *must* be there because if the pulley were perfect *W* *would* balance $\frac{1}{2}W$.

Is it not apparent that the well-known facts, including the fact that the smoother we make pulleys the more nearly does *W* balance $\frac{1}{2}W$, have induced him to so use "pulley" or "perfect pulley" that for him balancing *W* by $\frac{1}{2}W$ is part of the connotation of the expression, a necessary condition of a thing's being a perfect pulley? Some people nowadays would not call a loaf "bread" if it failed to react to the chemical tests for starch, though others, whose usage of "bread" has not been equally affected by science, would call it "bread" provided it was otherwise satisfactory. Surely we have come to know how this man uses "perfect pulley"; and that in his usage the request for a perfect pulley on which *W* does not balance $\frac{1}{2}W$ involves a description which describes nothing, is self-contradictory? There is no process of calculation by which we can show this to him, as we can show him that when he asks for the proof that 2345 multiplied by 3 equals 6935 he is making a request which is self-contradictory. But neither is there a process of calculation by which we can show him that a request for a proof that $1 + 1 = 1$ is a self-contradictory request.

He appears to ask for something because, though his description "a movable pulley in which *W* does not balance $\frac{1}{2}W$ " may be used as he uses it, there is, or we can easily imagine, a use in which such a description might describe something, "Laws of nature broken; Scientist finds golden pulley, etc." There is, or we can easily imagine, a use of "Union Jack" in which one could find one in purple, green and yellow; you know what such a flag would be like—a Union Jack in purple, green and yellow. When a philosopher asks for the unattainable, the fact that he is doing so is frequently obscured by the existence of a "contingent copy" of what he wants—like those which we find for the pulley and the flag. And the requests for analysis are no exception. The philosopher complains, perhaps, that we say that his request for the analysis of *X* propositions into non-*X* propositions makes no sense. "On the contrary," he says, "it is quite easy to explain what I want. You know what general sentences are, don't you? And you know what non-general sentences are, don't you? Well what I want is that the former should be translatable into combinations of the latter without the use of such expressions as 'and so on.'" Now this describes a perfectly possible ideal. What is there to prevent our altering our use of English so that this should be the case? But this of course would *not* be what is wanted by the philosopher who is asking for the analysis of general propositions into non-general propositions. It only looked as if it were what he wanted because we allowed him to translate his request into "Are general sentences translatable into non-general sentences?" and then forgot the reminder for the formal mode (*see* p. 463). [P. 523 in this volume. *ED.*]

Had we remembered this we should have realized that what he asks is that general sentences *used as they are now used* should be translatable into

non-general sentences *used as they are now used* and without the use of “and so on” *used as it is now used*. And this is like asking that 20 shillings should have the value they now have and be equal in value to 20 half-crowns, meaning here again not just coins of the half-crown shape and size, but coins of half-crown value.

Here is another factor which prevents metaphysicians noticing how, as requests for definitions, their requests are self-contradictory.

Let us sum up our conclusion so far with regard to the question “What is Time?” or “What are propositions about Time or involving Time?”

(1) There are people who ask these questions and are satisfied by such a definition as Moore’s or by the definition “‘Time is real’ just means ‘There are events such as race meetings, collisions, wars.’”

(2) There are people who are dissatisfied with any definition of Time in terms of a class of temporal facts, because such definition does not give us statements which mean the same as statements about Time—destroy its unity, etc.

(3) There are people who are dissatisfied with any definition of Time in terms of “temporal facts,” because they are dissatisfied with a definition of “temporal facts” as “such as ‘Smith was angry’ and so on” on account of the specimen fact still involving Time and on account of the expression “and so on.”

It remains (a) to say something about the insatiableness of the request for an account of the notion “and so on”; (b) to show that there is not some definition not in terms of temporal facts which would satisfy those hitherto unsatisfied. But these points will reappear in other examples and may be ignored for the present.

3.22. *Category puzzles: (b) Nations.* Both Professor Broad and Dr. Ewing²⁶ express themselves as *in doubt* whether statements about nations can be analysed into statements about individuals. But about what are they in doubt? We know that there is no statement of the form “Every Englishman . . .” which means just the same as “England has declared war.” We know also that if asked by a child “What does ‘England has declared war’ mean?” we should say “Well, a great many people in England are hurrying to make shells and tanks and guns and gas, and a message has been sent by the man who manages these things for Englishmen to the man who does the same for the people they are going to fight, to say that now they are going to fight and so on.” And we should say that the child would after a while know what “England has declared war” means. Or we might proceed thus: “To say there is a nation in Arabia is to say that there are a number of people there *nationally* related” and this means “that there are a great many people who perhaps all have the same king or queen or have all decided that a certain two or three people shall rule over them, though of course this isn’t necessary, they may have no governors but just be alike

26. Broad, *Examination of McTaggart*, Vol. II, p. 693; Ewing, *Idealism*, p. 435.

in. . . ." We are reminded of a doctor trying to explain what paranoia is. We say "he has no definition." And this is what many people say about our efforts on behalf of the child. They say "This is no definition; you have not given an analysis of what one says in, for example, 'There is a nation in Arabia which never remains long in one place.' You may have *explained* what you mean but you haven't defined it."

Now some say our explanation is no definition because as one might say it is never completed unless you call adding "and so on" completing a definition. Others might say "Even if you could complete your infinite stories you would not have provided a statement which means the same as, for example, the simple statement that England is at war." Some might be dissatisfied with what we have done on the ground that we have not gone far enough and told them what individuals are so that we have not explained the nature of our "specimen" facts. We may ignore these last people. They will be satisfied no doubt when we reach the philosopher's paradise where a man speaks only of his own sensations and only at the time he is having them. Here at last generality, uncertainty, and reduplication have disappeared, for here are found the perfect proper names, the incorrigible knowledge and the ultimate categories that we have sought so long.

But we must concentrate our attention (a) on those who say that statements about nations cannot be translated without loss of meaning into statements about individuals, though the tests for the truth of statements about nations may be the same as the tests for the truth of the long stories about individuals; (b) on those who allow that nation-statements may mean the same as individual-statements ending "and so on," but complain that this is not a definition because it is not complete—that what they wanted has not been done because we have not completed a definition of what distinguishes those statements about individuals which are equivalent to statements about nations from those which are not.

It is the same when if asked "What is a chair?" we reply "A chair is a set of sensations *chairishly* related," or "To say there is a chair here is to make a certain sort of statement about sensations." People say "*What* sort?" It then appears that no statement about sensations ever entails a statement to the effect that a chair is present, or, if you like, that only at the point of infinity does one reach a statement in terms of sensations which entails a statement about a chair. And others object that even if one could complete the endless story (in other words apart from the objectionableness of "and so on"), they would reject the definition. They say: "A statement that a chair is here is categorical, and can never be equivalent to statements about what we should smell if we sniffed, what we should hear if we listened, etc. And surely an arch-deceiver is logically possible." There is just no doubt that no more extensive knowledge of English or more ingenious use of the knowledge we have would ever enable us to produce something in terms of English expressions at present in use, which would be called

by these people a definition of statements about chairs in terms of sensations. And some will remain dissatisfied even if we invent expressions such as "chairishly" and explain the analogy with Moore's invention of "temporal fact."

It may be said "You have not shown that those who allow that 'There is a nation in Arabia' means the same as 'There are individuals in Arabia who are nationally related' are insatiable. For if you provided a definition of 'nationally' they would be satisfied. And the people who allow, as some would, that 'There is a chair in the room' means 'There are chairish sensations among our roomish sensations' would be satisfied if a definition of 'chairish' could be provided."

But this request for a definition of what it is for individuals to be nationally related as opposed to non-nationally related comes from another great class of unsatisfiable requests for analysis. The only definition in terms of individual statements which will mean the same as "nationally" will involve the expression "and so on." The only possible definition of "chairishly related" will also involve the expression "and so on"; it will involve an infinite disjunction of conjunctions of statements about sensations. And it will be complained that it is just this infinity which is mysterious. It is true that if a person is satisfied about the category of chairs (or nations) then all that now puzzles him is the nature of the distinction between chairish groupings of sensations on the one hand, and non-chairish groupings on the other (between national groupings of individuals and non-national). But about this he may well be insatiable.

3.23. *Differentia puzzles.* Let us look at other examples of this sort of request which arises not from trouble about the *form* of a proposition nor from trouble about the *category* of its subject but from trouble about the *differentia* of its subject. Allowing that Henry is an individual, what makes him Henry and not Albert? Allowing that a cow is an animal, what is the nature of the distinction between a cow and a buffalo? It is no doubt, in the latter case, the possession of a common property; but what is this property? People say, "We cannot define what it is to be a cow." They often have at first the idea that what they are saying is that "cow" is not definable in the way that "brother" is.²⁷ Now it happens that "cow" is definable in this way though one is apt to overlook it. For cows are female kine. But this definition is at once rejected by one who asks *metaphysically* "What is a cow as opposed to a buffalo?" He says "Ah! yes of course that sort of definition. But what is it to be kine? What is it to be female? Must animals if they are to be kine have horns? Must they chew the cud? Must they avoid canine ears? But none of this is essential. Is it then that they must

27. Wittgenstein has given me the impression that he thinks that our trouble here consists in wrongly fancying that all words are definable like "brother." But in the sense here involved "brother" is also indefinable. What is true is that the trouble arises from our fancying that the only reductive explanation is through conjunctive definition of which the definition of "brother" is a model.

either have the right horns, *or* chew the cud, *or* have the right ears? But this disjunctive character hardly suffices to constitute an animal a cow."

At once we find ourselves in the situation of a man who wrote: "We can say that horses are mammals, move on legs not wheels, are bred not built, and so on. But are these qualities essential? There is no selection of them which enables us to construct that 'elusive quality of horsiness which we can detect only by acquaintance with the animal and watching it perform its functions.'" ²⁸ This elusive quality becomes for Locke an unknown essence. He says "He that thinks he can distinguish sheep and goats by their real essences, that are unknown to him, may be pleased to try his skill in those species called *cassiowary* and *querechinchio*."²⁹ We can easily imagine people saying that we know of its presence by the intellect or *infer* it from the qualities we detect by the senses. Heaven knows how we justify the inference since we have *never* observed the essence in conjunction with the signs of its presence. Notice how a transcendental ontology is associated with scepticism, intuitionism and problematic inference of a *very* peculiar kind.

Now what is it that is wanted and is such that the failure to find it (1) is represented as ignorance and (2) leads to these entrancing tales about elusive essences? What is the essence of electricity? Do we not really know what it is for a wire to be electrically charged?

As usual, it is possible to offer a "contingent copy" of what is wanted. If "cow" like "skewbald" and "spotted" could be defined as a conjunction or disjunction of sensory adjectives without the use of "and so on," this would be what is wanted. Now this is an understandable ideal provided it is not required that the words should function as they now do, i.e. stand for the qualities they now stand for. But, of course, this is required. And as the use of the word "cow" is not related to the use of the sensory adjectives on this simple conjunction-disjunction model it is self-contradictory to ask whether, keeping the use of language unchanged, we can set out "*x* is a cow" as a conjunctive-disjunctive function of a finite number of statements attributing sensory adjectives. It does not follow that it stands for another character to be inferred from the sense characters, as "has an enlarged liver" is to be inferred from "looks yellow etc." It is related to the use of them in its own way, a way with which we are perfectly familiar. There are sense characters which are characteristic of cows though they are not necessary conditions of a thing's being a cow, and others which are not. And we can go on explaining as long as we like which characters are characteristic and which are not.³⁰ Prof. Broad, many years ago, suggested a model which

28. Notice that uneasiness about the doctrine that acquaintance with the animal enables us to detect a quality in addition to its colour, shape, etc., produces a half return to a positivistic doctrine that horsiness consists in these and the functions of the animal. If only this half return had been pursued. . . .

29. *Essay concerning Human Understanding*, Bk. III, Chap. VI, Section IX.

30. And some more so than others. Just as some are more characteristic of St. Peter or Napoleon than others.

throws a light on this. Someone said, "I know perfectly well what 'horse' means, but I cannot *analyse* what it means." Broad said that it seemed to him that such words as "horse," "house," "cow," are not analysable in the ordinary sense. He said that in the case of such words there are n characters such that if any m of these are present we say that a thing is a horse, a cow, etc., as the case may be. He said this with a view to helping those who said in a puzzled way, "I know well what these familiar words mean. How then is it that I cannot give their analysis?" Broad explained that a thing's being properly called a cow, did not determine uniquely its having this or that character but determined it with such and such a degree of freedom.³¹

Of course this again is only a model. There is no finite list of sensory statements related to "That is a cow," even on these more complicated lines. And it is just this infinity as usual which troubles people.

If a child asks us, "What is a zebra?" we explain that it is rather like a donkey, has long ears and a mane which stands up, is rather less angular than a donkey and thus somewhat resembles a pony. Must it have long ears? Well no, but they usually have. They have, of course, hoofs like a donkey and they are nearly always striped. They eat grass, breed and so on, like donkeys.

Similarly if a child asks us what a tallboy is, or a chair, or what it is for people to form a nation.

In all these cases we can *explain*. We finish always with the expression "and so on" to cope with the infinite. If it is said that this prevents our explanation being a definition, then we cannot find one because there is nothing which the inquirer would call a definition no matter how hard we were to work with the words we have or how many new ones we were to invent.

Here then is another large class of metaphysical requests for analysis which like the others we have considered are distinguished from ordinary requests for analysis by the fact that they are requests that a certain class of statements should be exhibited as finite conjunctive-disjunctive functions of another "fundamental" class, when this is impossible because the class of statements in question happens *not* to be a finite conjunctive-disjunctive function of those which are taken as fundamental. Some would allow that they are infinite functions of the fundamental statements; others would insist that not even the infinite functions mean the same as the statements to be analysed.

3.24. *Do the transcendental theories provide analyses?* It may now be objected "You have reached the conclusion that if the philosopher is asking for an analysis then he is asking for the impossible, only because you have considered only the wrong analysis. You have considered analysis of general propositions into specific propositions, analysis of super-individual

31. See also Broad, *Examination of McTaggart*, Vol. I, p. 125.

things such as Time, Space and nations into individual things, and of individual things into sensations. The right answer to the question 'What are numerical propositions?' is that they predicate a peculiar kind of trans-individual quality applicable only to groups, or that they are analysable into general propositions together with the peculiar relation *other than*. General propositions are about a *variable entity*, neither Smith nor Jones, neither this nor that. Propositions about nations are about an entity which is not a person nor to be reduced to persons though it is in many ways like the persons which belong to it,³² and its nature is known to us only through them. And Space and Time and a work of art, such as *Hamlet*, are again about entities which are 'neither physical things nor minds nor sensa, neither particular existents nor abstract universals, neither substances nor mere qualities, relations, or states of substances, and therefore elude orthodox philosophical classifications. These things cannot be said to exist in the sense in which particular things and persons can be said to do and yet are essentially particular and not abstract universals.'³³

Propositions about numbers, universals, or propositions are about what is objective, real and possible, but non-sensible, neither subjective nor palpable and spatial.³⁴ These objects do not exist but they subsist.

These theories are perfectly correct. They could not be otherwise since they proceed on the lines: The peculiarity of facts about classes, numbers, propositions and characteristics is that they are about *subsistent entities*. What are subsistent entities? Well, they are not chairs and tables. Indeed they are not known by the senses but by the intellect. Characteristics, for example, are subsistent entities, so are propositions, numbers and classes.

But the idea that there are questions to which these theories and the positivistic or reductive theories are alternative answers arises from a confusion. The question "What are *X* propositions?" may mean "What is the analysis of propositions with regard to propositions that they are *X* propositions, e.g. '*Something moved* is a general proposition'; and it may mean "What is the analysis of propositions which *are X* propositions, e.g. '*Something moved*.'" Now these theories provide answers of a sort to the first question but not to the second. If I ask "What are propositions about instincts?" and someone says "They are propositions about dispositions which, etc." this is a definition which brings that class of propositions under a genus and mentions a differentia. But no one supposes that this enables me to translate sentences expressing propositions about instincts into sentences, which are not propositions about instincts. Hence anyone who, wishing to do that, asks "What is the analysis of propositions about instincts?" will be entirely dissatisfied and will say "But what is a disposition?" Similarly, the people who ask "What are numerical, fictional, general, national, material,

32. Broad, *Examination of McTaggart*, Vol. II, p. 693.

33. Dr. A. C. Ewing, *Idealism*, p. 433. He is not giving a theory of his.

34. Russell, *External World*, p. 201.

propositions?" in that sense of these questions which we have been considering, will be dissatisfied if offered one of these definitions in terms of a transcendental constituent. He will at once re-express his questions in the forms, "What is a variable entity?" "What is a subsistent entity? and how do the numerical ones differ from others?" "What is a particular universal?" Just as when I asked a plain man, "What is the proposition $2 + 2 = 4$ about?" and received the answer "Numbers," I asked at once "What are numbers?" and received the answer "Oh, I don't know, I can't answer that, 2 and 3 and 7 are numbers." The transcendentalist likewise when asked "What are these entities?" replies "They are ultimate. Such things as nations, institutions, poems, the Exchequer are particular universals. Such things as characteristics, classes, propositions are subsistent entities." That is, the transcendentalist agrees with the conclusion we have reached about *our* question, namely the conclusion that when the profound metaphysician asks, "What is the analysis of *X* propositions?" then his request is a request for the analysis of the unanalysable. He agrees with us, too, that merely to say this is inadequate. Something must be done to explain why we should so persistently return to our vomit, the positivistic theories; and the explanation he offers is that the entities which the ultimate but "difficult" propositions are about, are of a sort we have hardly recognized (Russell),³⁵ because they are not detected by the five senses and consequently they "elude orthodox philosophical classifications" (Ewing). How this reminds us of the fictional entities upon which Russell poured so much scorn.³⁶ But at the moment we must emphasize our agreement with the negative aspect of the transcendentalist's conclusion, namely, that the metaphysician's requests for the analysis of *X* propositions into non-*X* propositions is a request for what is impossible.

And now the inadequacy of this conclusion is still more apparent because it is apparent that the transcendentalist theories are common-sense answers dressed up. The plain man, when asked what the proposition $2 + 2 = 4$ is about, and how we know it, replies "It is about numbers and we know it in a special way, and 'Red is a colour' is about colours." The transcendentalist replies: "Both propositions are about subsistent entities and we know them by intuition." The plain man, when asked "What is 'There is a chair in this room' about? and how do we know it?" replies 'It is about a chair, of course, an article of furniture, and we know it by looking, by the evidence of our senses.' The transcendentalist replies 'It is about a material thing which is not to be identified with our sensations and we know it by direct but not immediate knowledge,³⁷ or 'in and through' our sensations, but the knowing of it is not to be identified with sensing, it is

35. *External World*, p. 201.

36. *Introduction to Mathematical Philosophy*, p. 169. There is a difference. Fictional propositions in one sense are analysable into non-fictional.

37. Stout, *Mind and Matter*, p. 256. Here is an answer thoroughly common-sense in some respects and not in others.

something more than this, and what is known by this process is something more than mere sensing reveals, or perhaps we infer the chair from what we know by our senses."

The plain man, wishing to encourage us to believe in the soul, says "You believe in the wind don't you, though you can't see it? Well, it is like that with the soul." What the phenomenalist resents is the suggestion that it is not by our eyes and ears that we know of the existence of the wind, when there is one. This leads him to say "The wind is nothing but slates off the roof and a smell from the gas-works. You speak like the Irish coachman who whispers to children that goats can see the wind." But of course the wind isn't just that. Or is it just slates off the roof and/or a smell from the gas-works and/or a rustle in the leaves, the hurrying of the clouds and so on? Is it or isn't it?

Ordinary language suggests analogies which puzzle us. From the rapidity of Smith's pulse I infer that the malaria germ is in his blood, from the fall of the slates that Boreas is angry, from the powerful smell that there is a cheese near which is going bad. Transcendentalist language emphasizes and (usefully) collects these suggested analogies and thus increases these puzzles and distils them into more concentrated forms. Positivism suggests a way of removing them. The answer "The classes of proposition which puzzle us are ultimate, unanalysable" insists that the positivist's way out will not do. But it leaves us where we were, except in the important respect that we can no longer imagine that definition will help us out. We are left giving the answer "'Smith is good' is about Smith and goodness, about an ego and a value predicate; it is not a statement about a body and how it behaves." A realist philosopher might say "You ask 'Do we know the past and how, since it no longer exists to stand in any relation, cognitive or otherwise, to anything?' the answer is that we *do* know it, by memory." But we do not need a philosopher to give us this answer. Again, after reading Zeno's arguments to prove that we cannot reach the end of a racecourse we do not need a philosopher to show us that we can and how. A mere "plater" can do both quicker. But we know that there is another sense in which only a skilful philosopher can show us that we can and how. He will show us what is wrong with Zeno's puzzling argument—give us what we want.

We have seen, however, that in the case of the profound metaphysical questions we have looked at, definition is not what is wanted. They are of the form "What are *X* propositions?" or sometimes "What is the analysis of *X* propositions?" or "Surely *X* propositions are not ultimate, what is their analysis?" We have found that in these cases "analysis of *X* propositions into non-*X* propositions" describes nothing, so that to say that what we want here is definition of *X* propositions is to say nothing. On the other hand to say that what we want is this conclusion that analysis is impossible, takes no account of our use of the phrase "Surely *X* propositions are not ultimate"

and leaves us still unsatisfied. Nor is this dissatisfaction removed when it is explained how easy it is to pass from sensible requests for analysis to non-sensical ones because of ambiguities in "*X* proposition" and "mean." For we feel that even when these confusions have been removed and we are clear that we are asking with regard to an ultimate class of propositions, "What *are* these propositions?" still we are asking for something. But what?

4. *The metaphysician may be described as seeking descriptions of a certain sort. But of what sort? and how do they help him?* The answer may be put in three ways:

(1) We might say that we are asking for analyses in a wider sense of "analysis," a sense which does not require that if p_1 is analysable into p_2 then the sentence " p_1 " and the sentence " p_2 " mean the same. This is Mr. Duncan Jones's suggestion.³⁸ It has two important merits: (a) It emphasizes the continuity of metaphysics with analysis. (b) It hints that our trouble lies in the fact that we sometimes are more inclined to say that two sentences express the same proposition (stand for the same fact) than we are to say that they mean the same.

It will, however, be objected that this altering of the use of words does not meet the case. The question was, e.g. "Can general propositions be analysed into non-general propositions?" and the trouble was that we were inclined both to say Yes and to say No. Now it is no use saying "In a new sense 'yes,' in the old sense 'no,'" because the question was "In the old usual sense of analysis, can general propositions be analysed into non-general propositions?" We have shown that they cannot be unless a definition with "and so on" in it is counted as a definition. But is this a definition in the old sense or isn't it? The answer "It would be in a new sense" is no more use here than it is when I ask "Is a cassiowary a goat?" or "Did Smith exercise reasonable care or didn't he?" You might as well say when asked whether a dog has gone round a cow who keeps her horns always towards him "He has in a sense."

(2) We might say: "In a new sense of 'meaning' the metaphysician asks, 'Do general sentences mean the same as some collection of non-general sentences?' Does the statement 'There is a nation in Arabia' mean 'There are a number of individuals in Arabia who are nationally related'?" He is confused by the old sense of meaning and so does not realize that the answer to his question is emphatically "Yes." But again there will be the objection that the question asked was in terms of the old use of meaning. We come on cases where it is difficult to tell whether two sentences mean the same, express the same proposition, stand for the same fact or not. Now, it will be said, there is no use in saying that there could easily be a sense in which the answer would certainly be "Yes" or a sense in which

38. I cannot make him responsible in any way for the use I have made here of what he writes in "Does Philosophy Analyse Common Sense?" *Aris. Soc. Suppl.*, Vol. XVI.

the answer would certainly be "No." For what we want to know is whether in the usual sense of "mean the same" they do or do not mean the same. And when people allow that "There is a penny on the table" means the same as "If you look you will see a brownish circular or elliptical patch, if you . . . and so on" but inquire whether this is a definition, then it is no use saying "There could easily be a sense of definition in which it would be a definition." And this answer is also no use in dealing with disputes between philosophers as opposed to disputes within the breast of a single philosopher. We shall see later how far there is use in saying this and how far there is not.

(3) We might say: "What the metaphysician asks for when he asks 'What are *X* propositions?' is not a definition but a *description*, and when he asks whether *X* propositions can be analysed into non-*X* propositions he is asking for a *description* of the relations between them. He is apt to think that he is asking for a definition because in many cases to give a definition of *X* propositions has been the best way of giving a description. When the philosopher says analytic propositions are a sort of verbal proposition, this must not be taken as a definition but as a description throwing light upon the nature of analytic propositions and their relations to verbal propositions. By this means he describes a man asserting an analytic proposition just as one may describe, to a Red Indian, a man riding a motor cycle as a man riding a horse on wheels.

"And similarly to say that a metaphysical statement is a sort of analytic statement but not quite because it is a sort of description, is to give a description of a metaphysical statement and of a metaphysician."

Two objections may be made. First, it will be said: "The metaphysician asks 'Are general propositions to be identified with some combination of non-general propositions or not?' 'Are analytic propositions to be identified with verbal propositions or not? Can the one class be defined in terms of the other, or not?' You say 'They are not to be so identified with each other but the one can be described by reference to the other as rather like the other.' This is like the man who when asked whether a llama is a goat or not, replies, 'No, but a llama may be described as a sort of goat.'" We can recognize in these objections the objection made to the first two accounts of what it is the metaphysician really wants.

There is a second complaint which may be raised against the first and second accounts of what the metaphysician really wants, namely, that they do not give an analysis (new sense) of the new sense of "analysis," or the meaning (new sense) of the new sense of "meaning," and that therefore they do not analyse (new sense) or give the meaning of (new sense) "metaphysics." Similarly it may be objected that our description of a metaphysician is *inadequate*. It may be said "You say the metaphysician describes ultimate classes of proposition, or describes the use of ultimate classes of sentence. But even if this is accepted you have not defined the meta-

physician; for not all descriptions of ultimate classes of propositions or sentences are metaphysical. Now which sort are? Until you have told us this, you have not told us what metaphysics is."

We are, by now, familiar with this sort of complaint. It is necessary to repeat that the request "What is a metaphysician?" is not a request for definition. We can *explain* what the *felidae* are. We do this "internally" by explaining that leopards, lions, lynxes and cats are *felidae*, and "externally" by explaining that dogs, monkeys and even Siamese cats are not. We can explain what a pony is by giving a false definition, "A horse under 14 hands high," and then explaining how this is not quite correct. Likewise we can explain what a metaphysician is "internally" by explaining that positivists and "ulimatists" are metaphysicians and "externally" by explaining that grammarians, logicians and poets are not. Here again we may in each case begin by a false definition "Metaphysics is grammar," "Metaphysics is logic," "Metaphysics is poetry," and then explain why this is not so, drawing attention to such statements as "Life is a tale told by an idiot." "The world was made by God," "Thou canst not stir a flower without troubling of a star," "All relations are internal."³⁹

However, it may still be complained that the definition is *inadequate* in that the descriptions the metaphysicians give are connected in some way which has not been brought out by showing that metaphysics is not science, not logic, not grammar, not poetry.

We may say, remember the "internal" part of our description. The metaphysician is concerned with those descriptions of ultimate classes of fact which bear on the great groups of puzzles which we have considered.

It may now be said, "Yes, but how do the descriptions bear on the puzzles? Bring out now the nature of the puzzles in such a way that it is clear how the descriptions bear upon them."

It is now clear that if we go on to make our description more adequate we shall be dealing also with the first complaint, namely, How does the answer "General propositions may be described as a sort of infinite disjunction of specific propositions" bear upon the questions, "Can general propositions be identified with specific propositions?" "Are the facts which correspond to them identical?" "Do the sentences which express them mean the same?" The answer put briefly is this: (a) The metaphysical questions, "Are *X* propositions to be identified with *Y* propositions?" "Do *X* sentences mean the same as *Y* sentences?" "Do they stand for the same facts?" arise and present difficulty not only because the expressions involved are ambiguous but also because they are "vague," especially the expressions "mean the same," "express the same propositions," "state the same fact." It is because of this that the descriptions are relevant. How the descriptions are relevant is obscure because the nature of the questions is misunderstood in a way in which the nature of questions which present

39. Locke, Bk. III, Chap. VI, Section V.

difficulty because of the vagueness of their terms is constantly misunderstood.

(b) The case is further complicated by the fact that the use of the expressions "have the same thing in mind when I say *S* as when I say *S'*," "mean the same by *S* as by *S'*," "express the same proposition by *S* as by *S'*," "state the same fact by *S* as by *S'*," are connected in a way which forms a slide irresistible by any logician, and we are all somewhat afflicted that way. For there are not cases in which one would *unhesitatingly* say one of these and deny another. At the same time, there are cases where one hesitates more about one than about another.

5. *Let us look again at "primitive" metaphysical difficulties.* In order to see all this, let us look once more at metaphysical difficulties arising, and let us look at them arising in people before they have been influenced by having the nature of their difficulties "explained" to them.

I remember someone saying to me, "You ask me to write an essay about Negation. But what is the trouble about Negation?" I may confess that I was somewhat at a loss. After all, what could be simpler? "It is Jones," "It is not," "Her coat was blue," "It was not blue." What is the matter with the negatives? Why prefer the positives?

Now this case presents with simplicity what we have seen so often. First, an attempt is made to deal with the difficulty by definition in terms of expressions, new or old, which certainly mean the same as the usual sentences for expressing negative propositions. Thus Ramsey suggests expressing negation by writing positive sentences upside down. This throws a light, but leaves a more refined question, leaves the shadow unreduced to the substance (*W*). Then we try saying " 'This is not a tiger' means 'This is a leopard or a lion or a giraffe or a donkey.' " Then for accuracy we add "and so on." Then it is said perhaps that this is just a negative sentence in disguise, because the whole infinite force of the negative lies in the "and so on." Or perhaps it is said that this does not mean the same as the original negative sentence.

The failure of the positivistic answers leads to the conclusion that negative facts are ultimate, that we are tempted to identify them with positive facts because the special sort of element they contain is not detectable by the senses. But this again does not satisfy.

Now what desire produces these abortive efforts? It is this. No one minds admitting that there are negative sentences as well as positive ones, but everyone feels uneasy when asked whether there are negative *facts* as well as positive ones. Yet negative sentences have meaning, express propositions which are true. If these propositions are not identical with propositions expressed by positive sentences, then surely what makes them true must be not identical with what makes true the propositions expressed by positive sentences.

In general: The metaphysically-minded person feels that the actual world is made up solely of positive, specific, determinate, concrete, contingent,

individual, sensory facts, and that the appearance of a penumbra of fictional, negative, general, indeterminate, abstract, necessary, super-individual, physical⁴⁰ facts is somehow only an appearance due to a lack of penetration upon our part. And he feels that there are not, in addition to the ways of knowing the non-penumbral facts, additional ways of knowing employed for ascertaining the penumbral facts. At the same time the penumbral do not seem to be identical with the non-penumbral and thus *do* seem to call for extra ways of knowing.

Now this feeling of taking the same reality twice over (McTaggart⁴¹), this feeling of superfluous entities (Russell⁴²), this feeling of metaphysical double vision has been removed in certain cases by definition. We can imagine someone saying "What is the average man? How do I know he exists?" and then both troubles being dissolved by the definition "The average man is 5 ft. 4 ins. high' means 'The sum of the heights of individual men divided by their number is 5 ft. 4 ins.'" We can imagine someone saying "'All vegetarians are temperate' does not mean the same as 'No vegetarians are intemperate'" and then having to say that we know that the one fact is always present when the other is because the propositions are connected by a necessary connection which we know by intuition. We can even imagine someone saying "'Geoffrey is George's brother' does not mean the same as 'Geoffrey is a man and his parents are George's'"⁴³ and then again having to talk of two facts and two propositions connected by a necessary relation. Or again we can imagine someone wondering how we know that when (1) there are two white goats and four black in a field then (2) there are six goats in the field or there exists a class *goats-in-that-field* which has six members. Definition removes these troubles. Take the last case. When we saw that the two sentences meant the same or that the meaning of the one included the meaning of the other, then the appearance of plurality was explained by the plurality of sentences, while the assurance of identity was justified in the single meaning made true by a single fact. And with the disappearance of the ontological puzzle the epistemological puzzle vanished also. No wonder the definition model fascinated.

But unfortunately, as we have seen, there are cases⁴⁴ where definitions cannot be found, where no ingenuity reveals non-penumbral sentences which we can feel sure mean the same as the penumbrals. And yet we cannot feel that the facts which make the penumbral true are anything but the positive, concrete, etc., non-penumbral facts which make up the

40. Sometimes he makes physical facts ultimate, sometimes facts about sense-data. This serious complication I ignore.

41. *Nature of Existence*, Vol. I, p. 135.

42. *External World*, p. 107. Compare McTaggart's unsatisfactory answer in terms of "possessing the same content." What is Content?

43. People sometimes say "No two expressions really mean the same."

44. But for them, metaphysics would not exist.

actual world. Indeed there are cases where we know that there are no non-penumbral sentences which mean the same in the ordinary use of "mean the same" as the penumbral, while yet some of us feel that there is no difference between the facts which make those penumbral sentences true and those which make the non-penumbral sentences true. Some people come down on one side of the fence, some on the other. Thus Broad⁴⁵ argues from the fact that the question "Fido behaves in all respects intelligently, but is he intelligent?" is not silly like "Smith is rich, but is he wealthy?" to the conclusion that the question is synthetic like "I have given Smith two ounces of arsenic, but will it kill him?" That is, he concludes that the sentences "Fido behaves in all respects intelligently" and "Fido is intelligent" do not mean the same, do not stand for the same proposition, do not stand for the same fact. To do this is to represent the question "Smith still breathes, and he nods, smiles, and talks as usual, but does he really think and feel?" as like the question "Smoke still comes from the chimneys, the lights go on in the evenings, but have the inhabitants fled?" Has Smith's soul left his body but arranged with the nervous system that appearances shall be kept up in its absence? Has his *rha* flown? And yet we feel that the question is *not* like this—yet surely it must be, for Broad's premisses are true and there is no logical slip.⁴⁶

6. *Let us reformulate the difficulties.* These difficulties arise from a misunderstanding of the nature of the questions, "Are *X* facts ultimate?" "Are *X* facts reducible to *Y* facts?" Let us try reformulating them.

Instead of asking "Are *X* facts reducible to non-*X* facts or to *Y* facts?" let us ask "Are *X* propositions reducible to non-*X* propositions or to *Y* propositions?" And instead of asking this let us ask "Do *X* sentences mean the same as any combination of non-*X* sentences or of *Y* sentences?" And instead of putting this back⁴⁷ into "Do *X* sentences stand for the same proposition as any combination of non-*X* sentences or *Y* sentences?" let us ask instead "Are *X* sentences used in the same way as some combination of non-*X* sentences or of *Y* sentences?" i.e. "When we have an *X* sentence can we find a *Y* sentence which serves the same purpose?"

This reformulation is permissible, of course, only when we remember that it means "When we have an *X* sentence used in that way with which you are familiar, is there some combination of *Y* sentences used in that manner with which you are familiar, which serves the same purpose?"⁴⁸

We have then the questions, "When we have a general sentence can we find a combination of non-general sentences which serve the purpose it serves?" and "When we have a nation-sentence, can we find a combi-

45. *The Mind and its Place in Nature*, p. 614.

46. No logical slip between any *adjoining* steps one might say.

47. For dangers of this, see Ayer, *Aris. Soc.*, Suppl. Vol. XVI.

48. This is again open to misinterpretation but reference to p. 463 will prevent it.

nation of individual-sentences which serve the purpose it serves?" and so on.

Compare these questions with the questions "Does the paper pound serve the purpose which the sovereign served before the war?" "Could anything which is not a bridle serve the purpose which a bridle serves?" "The Red Indian with his single strip of hide can stop and turn his pony with it, so the practical, debunking person will say 'Yes,' may even insist that it is a bridle, which of course is quite untrue. The instructor in equitation will say 'No' because he cannot obtain with it the balance and 'collection' he obtains with the bridle. Others hesitate, wondering which is right. But what sort of wondering is this, and what sort of right and wrong? We see at once that we have only to put the question in the plural, 'Which of the purposes served by a bridle does the strip of hide serve?' to see that the answer is a matter of describing these, and if after this it is asked 'Well, does it serve the same purpose?' the question is now obviously 'Shall we say "It serves the same purpose" or shall we not?"

We can now see how to deal with the sovereign and the paper pound. Those who say the value of a thing is its power in exchange will say the paper pound does serve the same purpose. Others will say, "No there was something about a sovereign which a dirty bit of paper can never do."

And now let us take another case. People ask, "If when a dog attacks her, a cow keeps her horns always towards him, so that she rotates as fast as he revolves, does he go round her?" We may imagine them offering reasons "He does go round her, because he goes all round the place where she is standing, that is, he encircles her. Therefore he goes round her." "But," it may be protested, "he never gets behind her, therefore he doesn't go round her."

Suppose the disputants now appeal to you and ask "Which is right?" or "Which do you think is right?" There is at once an inclination to answer, "There is a sense in which he does and a sense in which he does not go round the cow." But this is untrue. There are not in English two uses of "go round" in one of which the answer is "Yes" while in the other it is "No." Had there been, the question would hardly have produced difficulty.⁴⁹ But the answer is not useless because it brings out how easily there might have been a use of language in which we should have had an answer ready, and thus hints that the question is a matter of language. It is, however, *very* necessary to explain what sort of a question about language it is.

This appears if we set out the right way to deal with the question. One should say: You speak as if you are asking a question about the dog and the cow. But you know the facts about them. And what is more you know the answer to the question, "What would ordinarily be said in such

49. We might say "Metaphysical difficulties have been so hard to remove because of the illusion that ambiguity is the only bar to logic."

a case when the question is put 'Did the dog go round the cow?'" For you know that people would hesitate and some insist, though with a certain bravado, that he did and others that he did not. In asking me this question you are treating me like a judge of the High Court who is considering a question of law not of fact, e.g. "Was it in the case described reasonable and probable that someone would try to cash the cheque which Mr. Smith made out so carelessly? Was it? or was it not?" Now I can of course give a decision if that is what you want. But you want more than that. You want me to sum up and bring out the features of the case which incline one to say that the dog went round the cow, and those which disincline one to say this. In this particular case, unlike other cases of the sort, this can be done fairly easily. For the features which incline one to say that the dog went round the cow are summed up in the statement "He circled round the place where she stood," while those which disincline one to speak so can be summed up in the statement, "He did not change his position with respect to the parts of the cow." Now you will notice that you who wished to say that the dog went round and your opponent who wished to say that it did not, had between you already described these features although at the time you regarded yourselves as giving reasons for its being right or wrong to say that the dog went round the cow. So you see you had already done what you wanted done though, because you mistook the nature of your question, you did this in a misleading way. Had you put your question in the form, "Which of the features which we expect to find in a case when told that *A* has gone round *B* do we find in the case of the dog and the cow?" you would not have found yourself in difficulties.

Let us return to the question: "Given such a sentence as 'There is cheese here' does this mean the same as any string of sentences about what we should see if we looked, smell if we sniffed, etc.? Is there any sensation-sentence which means the same, expresses the same proposition as, stands for the same fact as, the cheese-sentence?"

Here again, as we have seen, there is an inclination to say "There is a sense of 'meaning' in which the answer is 'Yes' and a sense in which the answer is 'No.'" But there are not two such uses of "meaning" in English. If there had been, the difficulty would have been removable in the way it is when someone says of a mare that she is a horse while someone else says she is not.

Here again the proper answer is: "You are not asking anything about cheeses, you know about them, what they are made of, and so on. But what is more, you are not asking what would be said here nor what the language experts would say here. No expert in heaven or earth could help you. What you are asking for is a decision and the reasons for it *in the sense in which reasons can be offered for a decision*—by counsel for the plaintiff and counsel for the defendant. But these as a matter of fact you

have already set out—the positivists have set out the ‘reasons’ for deciding in favour of saying that the sentences mean the same, the ‘ultimates’ have set out the reasons against saying this.”

There are cases of metaphysical dispute, however, where the answer should not be quite as above. Suppose *A* says that poetry which does not rhyme is not really poetry, while *B* says it is. Now in so far as the question is one of logic as to whether being poetry entails rhyme, *B* is right, because language is in fact so used as to make him right. But *A* is of course well aware that this is how language is used and is not denying what he knows to be true. But they think they are contradicting each other and are thus wrong. If now *A* asks, “Don’t you agree with me?” one can only explain those features of one’s attitude to their dispute which incline one to say, “I agree with *A*,” and those features of their dispute which incline one to say, “I agree with *B*.” (For neither the answer “I agree with *A*,” nor the answer “I agree with *B*” is correct though neither is incorrect.) Now this explanation will involve an explanation of the nature of the dispute, and this will involve describing what leads *A* to say what he does and what leads *B* to say what he does.

Similarly in metaphysics. Broad shows how as a matter of logic, “Fido is intelligent” does not mean the same as “Fido behaves intelligently.” But he has not grasped what those who deny this are doing. And since they advance their thesis as the contradictory of his, it is not to be wondered at that he should not have grasped what they are doing. On the other hand surely it is apparent that even when they have to allow that the two sentences do not mean the same, they are not going to be convinced that they were wrong. No proof that taken as a statement in logic what they say is false convinces them. The younger child who has been insisting against his pedantic elder brother that a fox has a tail may not be convinced that he was wrong even when an adult convinces him that experts and others do not say that a fox has a tail (*W*).

The situation is often complicated by the fact that the following steps seem impeccable: “What I have in mind when I say *S*, e.g. ‘Smith can do successfully all the tests for colour blindness and *never* fails in ordinary life either’ is not the same as what I have in mind when I say *S*’, e.g. ‘Smith can see red and green and all the colours.’ Hence *S* and *S*’ do not mean the same. Hence they do not stand for the same proposition. Hence they do not stand for the same fact.” As we have seen, the argument may be reversed. Now as a matter of fact, the features of the use of two sentences which incline us to use the expression “stand for the same fact” are not quite the same as those which incline us to use “put the same ideas into our mind.” Hence it sometimes happens that we get from certain features of the use of two sentences a strong inclination to say that they do *not* mean the same, derived from a strong inclination to say that we have not the same things in mind when we utter the one as when we utter the

other, and at the same time a strong inclination to say that they do not stand for different facts. And when this happens we may be induced to say that *S* and *S'* stand for different facts when but for faith in this logical ladder we should never have done so; and we may be induced, by tipping the ladder the other way, to say that two sentences mean the same when we should never otherwise have done so.

It is this ladder or slide which, together with a wrong way of speaking about meaning and the assumption that the only purpose of indicative sentences is to state facts, leads us to look for fictional facts to fit the fictional propositions required by the significance of fictional sentences. Here the assumption that the sole function of indicative sentences is to state facts reaches the limit of absurdity. It will be noticed that this assumption is the Verification Principle. Having seen its falsehood in the case where the factual functions of an indicative are zero, we are ready to look for non-factual functions in cases where the factual functions are not zero, in ethics, in mathematics, in psychological statements, in metaphysics, and thus in the principle itself. A flood of light is thrown on the numerous philosophical disputes arising from the fact that sentences may agree in factual function while they do not in other functions. But it must be remembered that this method is far from fool-proof because the hardest problems are those in which there is an inclination both to say that two sentences *stand for the same fact* and to deny this, e.g. psychological and behaviour sentences (worst of all), analytic and verbal sentences, material thing and sensation sentences (less acute). And such a conflict, as we have seen, can be met only by explaining its nature, that is by explaining that the dispute is resolved by setting out what has induced each disputant to say what he has said.

To sum up: The metaphysician is concerned with certain fundamental ontological and epistemological reduplication questions: Are *X* facts to be identified with *Y* facts? How do we get from knowledge of the latter to knowledge of the former?

Usually, even as questions of logic, there is no right or wrong answer to these questions. I should be inclined to say this in every case where the question is in the form which reduplication is most intolerable, namely, "Are *X* facts nothing but *Y* facts or are they something over and above *Y* facts?" Sometimes in the form in which reduplication is less intolerable, namely, "Do *X* sentences mean the same as *Y* sentences" (taken as a question of logic) there is a correct answer "No."

But in either case the metaphysical dispute is resolved by explaining what induces each disputant to say what he does. This is done as follows: First explain the nature of the question or request; (a) Negatively—remove the wrong idea that it is a question of fact whether natural or *logical*; (b) Positively—give the right idea by showing how, as in other disputes of this unanswerable sort, the questions are really requests for a

description of (1) those features of the use of the expressions involved in the questions which incline one to answer "No." In the case of ontological questions such as "Are *X* facts to be identified with *Y* facts?" "Do *X* sentences mean the same as *Y* sentences?" "Does the sentence *S* stand for the same fact as the sentence *S'*?" the expressions involved are of course (a) the expressions "*X* facts," "*Y* facts," "*X* sentences," "*Y* sentences," "The sentence *S*" and so on, and (b) the *connectives* "stand for the same fact," "mean the same" and so on. In the case of epistemological questions, expressions such as "know," "rational," take the place of the connectives.

Second, provide the descriptions that are really wanted.

Fortunately when the nature of the questions has been explained, then the nature of the "answers," "theories" and "reasons" which they have been "offering" and "advancing" becomes clear to the disputants. And then it becomes clear how much of the work of providing the descriptions has been already done, though under the disguise of a logical⁵⁰ dispute. Thus the metaphysical paradoxes appear no longer as crude falsehoods about how language is actually used, but as penetrating suggestions as to how it might be used so as to reveal what, by the actual use of language, is hidden. And metaphysical platitudes appear as timely reminders of what is revealed by the actual use of language and would be hidden by the new. To take an example which we have ourselves come upon: Some have said "Analytic propositions are verbal," others have said "They are not," and, in supporting these "views," they have between them done all that is primarily asked for by one who asks "Are analytic propositions verbal or are they not?"

Thus it appears how it is that, to give metaphysicians what they want, we have to do little more than remove the spectacles through which they look at their own work.⁵¹ Then they see how those hidden identities and diversities which lead to the "insoluble" reduction questions about forms, categories and predicates, have already been revealed, though in a hidden way.

50. At one time under the disguise of a contingent or natural dispute.

51. It should again be remembered how much of this is due to Wittgenstein.

Other Minds

by J. L. AUSTIN

[THIS PAPER WAS WRITTEN AS THE SECOND PART OF A SYMPOSIUM. THE FIRST PART BY PROFESSOR JOHN WISDOM IS NOT INCLUDED HERE.]

I feel that I agree with much, and especially with the more important parts, of what Mr. Wisdom has written, both in his present paper and in his beneficial series of articles on "Other Minds" and other matters. I feel ruefully sure, also, that one must be at least one sort of fool to rush in over ground so well trodden by the angels. At best I can hope only to make a contribution to one part of the problem, where it seems that a little more industry still might be of service. I could only wish it was a more central part. In fact, however, I did find myself unable to approach the centre while still bogged down on the periphery. And Mr. Wisdom himself may perhaps be sympathetic towards a policy of splitting hairs to save starting them.

Mr. Wisdom, no doubt correctly, takes the "Predicament" to be brought on by such questions as "How do we know that another man is angry?" He also cites other forms of the question—"Do we (ever) know?" "Can we know?" "How can we know?" the thoughts, feelings, sensations, mind, etc., of another creature, and so forth. But it seems likely that each of these further questions is rather different from the first, which alone has been enough to keep me preoccupied, and to which I shall stick.

Mr. Wisdom's method is to go on to ask: *Is it like the way in which we know* that a kettle is boiling, or that there's a tea-party next door, or the weight of thistledown? But it seemed to me that perhaps, as he went on, he was not giving an altogether accurate account (perhaps only because too cursory a one) of what we should say if asked "How do you know?" these things. For example, in the case of the tea-party, to say we knew of it "by analogy" would at best be a very sophisticated answer (and one

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to which some sophisticates might prefer the phrase "by induction"), while in addition it seems incorrect because we don't, I think, claim to *know* by analogy, but only to *argue* by analogy. Hence I was led on to consider what sort of thing does actually happen when ordinary people are asked "How do you know?"

Much depends, obviously, on the sort of item it is about which we are being asked "How do you know?" and there are bound to be many kinds of cases that I shall not cover at all, or not in detail. The sort of statement which seems simplest, and at the same time not, on the face of it, unlike "He is angry," is such a statement as "That is a goldfinch" ("The kettle is boiling")—a statement of particular, current, empirical fact. This is the sort of statement on making which we are liable to be asked "How do you know?" and the sort that, at least sometimes, we say we don't know, but only believe. It may serve for a stalking horse as well as another.

When we make an assertion such as "There is a goldfinch in the garden" or "He is angry," there is a sense in which we imply that we are sure of it or know it ("But I took it you *knew*," said reproachfully), though what we imply, in a similar sense and more strictly, is only that we *believe* it. On making such an assertion, therefore, we are directly exposed to the questions (1) "Do you *know* there is?" "Do you *know* he is?" and (2) "*How* do you know?" If in answer to the first question we reply "Yes," we may then be asked the second question, and even the first question alone is commonly taken as an invitation to state not merely *whether* but also *how* we know. But on the other hand, we may well reply "No" in answer to the first question: we may say, "No, but I think there is," "No, but I believe he is." For the implication that I know or am sure is not strict: we are not all (terribly or sufficiently) strictly brought up. If we do this, then we are exposed to the question, which might also have been put to us without preliminaries, "Why do you believe that?" (or "What makes you think so?" "What induces you to suppose so?" etc.).

There is a singular difference between the two forms of challenge: "*How* do you know?" and "*Why* do you believe?" We seem never to ask "*Why* do you know?" or "*How* do you believe?" And in this, as well as in other respects to be noticed later, not merely such other words as "suppose," "assume," etc., but also the expressions "be sure" and "be certain," follow the example of "believe," not that of "know."

Either question, "How do you know?" or "Why do you believe?" may well be asked only out of respectful curiosity, from a genuine desire to learn. But again, they may both be asked as *pointed* questions, and, when they are so, a further difference comes out. "How do you know?" suggests that perhaps you *don't* know it at all, whereas "Why do you believe?" suggests that perhaps you *oughtn't* to believe it. There is no suggestion¹ that

1. But in special senses and cases, there is—e.g., if someone has announced some top secret information, we can ask "How do you know?" nastily.

you *ought* not to know or that you *don't* believe it. If the answer to "How do you know?" or to "Why do you believe?" is considered unsatisfactory by the challenger, he proceeds rather differently in the two cases. His next riposte will be, on the one hand, something such as "Then you *don't* know any such thing," or "But that doesn't prove it: in that case you don't really know it at all," and on the other hand, something such as "That's very poor evidence to go on: you oughtn't to believe it on the strength of that alone."²

The "existence" of your alleged belief is not challenged, but the "existence" of your alleged knowledge *is* challenged. If we like to say that "I believe," and likewise "I am sure" and "I am certain," are descriptions of subjective mental or cognitive states or attitudes, or what not, then "I know" is not that, or at least not merely that: it functions differently in talking.

"But of course," it will be said, "'I know' is obviously more than that, more than a description of my own state. If I *know*, I *can't be wrong*. You can always show I don't know by showing I am wrong, or may be wrong, or that I didn't know by showing that I might have been wrong. *That's* the way in which knowing differs even from being as certain as can be." This must be considered in due course, but first we should consider the types of answer that may be given in answer to the question "How do you know?"

Suppose I have said "There's a bittern at the bottom of the garden," and you ask "How do you know?" my reply may take very different forms:

- (a) I was brought up in the Fens
- (b) I heard it
- (c) The keeper reported it
- (d) By its booming
- (e) From the booming noise
- (f) Because it's booming.

We may say, roughly, that the first three are answers to the questions "How do you come to know?" "How are you in a position to know?" or "How do *you* know?" understood in different ways; while the other three are answers to "How can you tell?" understood in different ways. That is, I may take you to have been asking:

- (1) How do I come to be in a position to know about bitterns?
- (2) How do I come to be in a position to say there's a bittern here and now?

2. An interesting variant in the case of knowing would be "You *oughtn't to say* (you've no business to say) you know it at all." But of course this is only superficially similar to "You oughtn't to believe it": you ought *to say* you believe it, if you do believe it, however poor the evidence.

- (3) How do (can) I tell bitterns?
- (4) How do (can) I tell the thing here and now as a bittern?

The implication is that in order to know this is a bittern, I must have

- (1) been trained in an environment where I could become familiar with bitterns
- (2) had a certain opportunity in the current case
- (3) learned to recognize or tell bitterns
- (4) succeeded in recognizing or telling this as a bittern.

(1) and (2) mean that my experiences must have been of certain kinds, that I must have had certain opportunities; (3) and (4) mean that I must have exerted a certain kind and amount of acumen.³

The questions raised in (1) and (3) concern our *past* experiences, our opportunities and our activities in learning to discriminate or discern, and, bound up with both, the correctness or otherwise of the linguistic usages, we have acquired. Upon these earlier experiences depends how *well* we know things, just as, in different but cognate cases of "knowing," it is upon earlier experience that it depends how *thoroughly* or how *intimately* we know; we know a person by sight or intimately, a town inside out, a proof backwards, a job in every detail, a poem word for word, a Frenchman when we see one. "He doesn't know what love (real hunger) is" means he hasn't had enough experience to be able to recognize it and to distinguish it from other things slightly like it. According to how well I know an item, and according to the kind of item it is, I can recognize it, describe it, reproduce it, draw it, recite it, apply it, and so forth. Statements like "I know *very well* he isn't angry" or "You know *very well* that isn't calico," though of course about the current case, ascribe the excellence of the knowledge to past experience, as does the general expression "You are old enough to know better."⁴

By contrast, the questions raised in (2) and (4) concern the circumstances of the current case. Here we can ask "How *definitely* do you know?" You may know it for certain, quite positively, officially, on his own authority, from unimpeachable sources, only indirectly, and so forth.

Some of the answers to the question "How do you know?" are, oddly enough, described as "reasons for knowing" or "reasons to know," or even sometimes as "reasons why I know," despite the fact that we do not ask

3. "I know, I *know*, I've seen it a hundred times, don't keep on telling me" complains of a superabundance of opportunity; "knowing a hawk from a handsaw" lays down a minimum of acumen in recognition or classification. "As well as I know my own name" is said to typify something I *must* have experienced and *must* have learned to discriminate.

4. The adverbs that can be inserted in "How . . . do you know?" are few in number and fall into still fewer classes. There is practically no overlap with those that can be inserted in "How . . . do you believe?" (firmly, sincerely, genuinely, etc.).

"Why do you know?" But now surely, according to the Dictionary, "reasons" should be given in answer to the question "Why?" just as we do in fact give reasons for believing in answer to the question "Why do you believe?" However, there is a distinction to be drawn here. "How do you know that I. G. Farben worked for war?" "I have every reason to know: I served on the investigating commission"; here, giving my reasons for knowing is stating how I come to be in a position to know. In the same way we use the expressions "I know *because* I saw him do it" or "I know *because* I looked it up only ten minutes ago"; these are similar to "So it is: it *is* plutonium. How did you know?" "I did quite a bit of physics at school before I took up philology," or to "I ought to know: I was standing only a couple of yards away." Reasons for *believing* on the other hand are normally quite a different affair (a recital of symptoms, arguments in support, and so forth), though there are cases where we do give as reasons for believing our having been in a position in which we could get good evidence: "Why do you believe he was lying?" "I was watching him very closely."

Among the cases where we give our reasons for knowing things, a special and important class is formed by those where we cite authorities. If asked "How do you know the election is today?" I am apt to reply "I read it in *The Times*," and if asked "How do you know the Persians were defeated at Marathon?" I am apt to reply "Herodotus expressly states that they were." In these cases "know" is correctly used; we know "at second hand" when we can cite an authority who was in a position to know (possibly himself also only at second hand).⁵ The statement of an authority makes me aware of something, enables me to know something, which I shouldn't otherwise have known. It is a source of knowledge. In many cases, we contrast such reasons for knowing with other reasons for believing the very same thing: "Even if we didn't know it, even if he hadn't confessed, the evidence against him would be enough to hang him."

It is evident, of course, that this sort of "knowledge" is "liable to be wrong," owing to the unreliability of human testimony (bias, mistake, lying, exaggeration, etc.). Nevertheless, the occurrence of a piece of human testimony radically alters the situation. We say "We shall never know what Caesar's feelings were on the field of the battle of Philippa," because he did not pen an account of them; *if he had*, then to say "We shall never know" won't do in the same way, even though we may still perhaps find reason to say "It doesn't read very plausibly: we shall never *really* know

5. Knowing at second hand, or on authority, is not the same as "knowing indirectly," whatever precisely that difficult and perhaps artificial expression may mean. If a murderer "confesses," then, whatever our opinion of the worth of the "confession," we cannot say that "we (only) know indirectly that he did it," nor can we so speak when a witness, reliable or unreliable, has stated that he saw the man do it. Consequently, it is not correct, either, to say that the murderer himself knows "directly" that he did it, whatever precisely "knowing directly" may mean.

the *truth*" and so on. Naturally, we are judicious; we don't say we know (at second hand) if there is any special reason to doubt the testimony; but there has to be *some* reason. It is fundamental in talking (as in other matters) that we are entitled to trust others, except in so far as there is some concrete reason to distrust them. Believing persons, accepting testimony, is the, or one main, point of talking. We don't play (competitive) games except in the faith that our opponent is trying to win: if he isn't, it isn't a game, but something different. So we don't talk with people (descriptively) except in the faith that they are trying to convey information.⁶

It is now time to turn to the question "How can you tell?" i.e. to senses (2) and (4) of the question "How do you know?" If you have asked "How do you know it's a goldfinch?" then I may reply "From its behaviour," "By its markings," or, in more detail, "By its red head," "From its eating thistles." That is, I indicate, or to some extent set out with some degree of precision, those features of the situation which enable me to recognize it as one to be described in the way I did describe it. Thereupon, you may still object in several ways to my saying it's a goldfinch, without in the least "disputing my facts," which is a further stage to be dealt with later. You may object:

(1) But goldfinches *don't* have red heads

(1a) —But that's not a *goldfinch*. From your own description I can recognize it as a *goldcrest*

(2) But that's not enough; plenty of other birds have red heads. What you say doesn't prove it. For all you know, it may be a woodpecker.

Objections (1) and (1a) claim that, in one way or another, I am evidently unable to recognize goldfinches. It may be (1a)—that I have not learned the right (customary, popular, official) name to apply to the creature ("Who taught you to use the word 'goldfinch?'"); or it may be that my powers of discernment, and consequently of classification, have never been brought sharply to bear in these matters, so that I remain confused as to how to tell the various species of small British bird. Or, of course, it may be a bit of both. In making this sort of accusation, you would perhaps tend not so much to use the expression "You don't know" or "You oughtn't to say you know" as, rather, "But that *isn't* a goldfinch," or "Then you're wrong to call it a goldfinch." But still, if asked, you would of course deny the statement that I do know it's a goldfinch.

It is in the case of objection (2) that you would be more inclined to say

6. Reliance on the authority of others is fundamental, too, in various special matters, e.g. for corroboration and for the correctness of our own use of words, which we learn from others.

7. Misnaming is not a trivial or laughing matter. If I misname I shall mislead others, and I shall also misunderstand information given by others to me. "Of course I knew all about his condition perfectly, but I never realized that it was *diabetes*; I thought it was cancer, and all the books agree that's incurable; if I'd only known it was diabetes, I should have thought of insulin at once." Knowing *what a thing is* is, to an important extent, knowing what the name for it, and the right name for it, is.

right out "Then you don't know." Because it doesn't prove it, it's not enough to prove it. Several important points come out here:

(a) if you say "That's not enough," then you must have in mind some more or less definite lack. "To be a goldfinch, besides having a red head it must also have the characteristic eye-markings"; or "How do you know it isn't a woodpecker? Woodpeckers have red heads too." If there is no definite lack, which you are at least prepared to specify on being pressed, then it's silly (outrageous) just to go on saying "That's not enough."

(b) Enough is enough; it doesn't mean everything. Enough means enough to show that (within reason, and for present intents and purposes) it "can't" be anything else, there is no room for an alternative, competing, description of it. It does *not* mean, e.g. enough to show it isn't a *stuffed* goldfinch.

(c) "From its red head," given as an answer to "How do you know?" requires careful consideration; in particular it differs very materially from "Because it has a red head," which is also sometimes given as an answer to "How do you know?" and is commonly given as an answer to "Why do you believe?" It is much more akin to such obviously "vague" replies as "From its markings" or "From its behaviour" than at first appears. Our claim, in saying we know (i.e. that we can tell) is to *recognize*; and recognizing, at least in this sort of case, consists in seeing, or otherwise sensing, a feature or features which we are sure are similar to something noted (and usually named) before, on some earlier occasion in our experience. But, this that we see, or otherwise sense, is not necessarily *describable in words*, still less describable in detail, and in non-committal words, and by anybody you please. Nearly everybody can recognize a surly look or the smell of tar, but few can describe them non-committally, i.e. otherwise than as "surly" or "of tar"; many can recognize, and "with certainty," ports of different vintages, models by different fashion houses, shades of green, motor car makes from behind, and so forth, without being able to say "*how* they recognize them," i.e. without being able to "be more specific about it"—they can only say they can tell "by the taste," "from the cut" and so on. So, when I say I can tell the bird "from its red head," or that I know a friend "by his nose," I imply that there is something *peculiar* about the red head or the nose, something peculiar to goldfinches or to him, by which you can (always) tell them or him. In view of the fewness and crudeness of the classificatory words in any language compared with the infinite number of features which are recognized, or which could be picked out and recognized, in our experience, it is small wonder that we often and often fall back on the phrases beginning with "from" and "by," and that we are not able to *say*, further and precisely, *how* we can tell. Often we know things quite well, while scarcely able at all to say "from" what we know them, let alone what there is so very special about them. Any answer beginning "From" or "By" has, intentionally, this saving "vagueness." But on the contrary, an answer beginning "Because" is dangerously definite. When I say I know it's a goldfinch "Because it has

a red head," that implies that all I have noted, or needed to note, about it is that its head is red (nothing special or peculiar about the shade, shape, etc., of the patch); so that I imply that there is no other small British bird that has any sort of red head except the goldfinch.

(d) Whenever I say I know, I am always liable to be taken to claim that, in a certain sense appropriate to the kind of statement (and to present intents and purposes), I am able to *prove* it. In the present, very common, type of case, "proving" seems to mean stating what are the features of the current case which are enough to constitute it one which is correctly describable in the way we have described it, and not in any other way relevantly variant. Generally speaking, cases where I can "prove" are cases where we use the "because" formula; cases where we "know but can't prove" are cases where we take refuge in the "form" or "by" formula.

I believe that the points so far raised are those most genuinely and normally raised by the question "How do you know?" But there are other, further, questions sometimes raised under the same rubric, and especially by philosophers, which may be thought more important. These are the worries about "reality" and about being "sure and certain."

Up to now, in challenging me with the question "How do you know?" you are not taken to have *queried my credentials as stated*, though you have asked what they were; nor have you *disputed my facts* (the facts on which I am relying to prove it's a goldfinch), though you have asked me to detail them. It is this further sort of challenge that may now be made, a challenge as to the *reliability* of our alleged "credentials" and our alleged "facts." You may ask

(1) But do you know it's a *real* goldfinch? How do you know you're not dreaming? Or after all, mightn't it be a stuffed one? And is the head really red? Couldn't it have been dyed, or isn't there perhaps an odd light reflected on it?

(2) But are you certain it's the *right* red for a goldfinch? Are you quite sure it isn't too orange? Isn't it perhaps rather too strident a note for a bittern?

These two sorts of worry are distinct, though very probably they can be combined or confused, or may run into one another; e.g. "Are you sure it's really red?" may mean "Are you sure it isn't orange?" or again "Are you sure it isn't just the peculiar light?"

I. REALITY

If you ask me "How do you know it's a real stick?" "How do you know it's really bent?" ("Are you sure he's really angry?"), then you are querying my credentials or my facts (it's often uncertain which) in a certain special way. In various *special, recognized* ways, depending essentially upon the nature of the matter which I have announced myself to know, either my current experiencing or the item currently under consideration (or uncertain

which) may be abnormal, *phoney*. Either I myself may be dreaming, or in delirium, or under the influence of mescal, etc.; or else the item may be stuffed, painted, dummy, artificial, trick, freak, toy, assumed, feigned, etc.; or else again there's an uncertainty (it's left open) whether *I* am to blame or *it* is—mirages, mirror images, odd lighting effects, etc.

These doubts are all to be allayed by means of recognized procedures (more or less roughly recognized, of course), appropriate to the particular type of case. There are recognized ways of distinguishing between dreaming and waking (how otherwise should we know how to use and to contrast the words?), and of deciding whether a thing is stuffed or live, and so forth. The doubt or question "But is it a *real* one?" has always (*must* have) a special basis, there must be some "reason for suggesting" that it isn't real, in the sense of some specific way, or limited number of specific ways, in which it is suggested that this experience or item may be phoney. Sometimes (usually) the context makes it clear what the suggestion is; the goldfinch might be stuffed but there's no suggestion that it's a mirage, the oasis might be a mirage but there's no suggestion it might be stuffed. If the context doesn't make it clear, then I am entitled to ask "How do you mean? Do you mean it may be stuffed or what? *What are you suggesting?*" The wile of the metaphysician consists in asking "Is it a real table?" (a kind of object which has no obvious way of being phoney) and not specifying or limiting what may be wrong with it, so that I feel at a loss "how to prove" it *is* a real one.⁸ It is the use of the word "real" in this manner that leads us on to the supposition that "real" has a single meaning ("the real world" "material objects"), and that a highly profound and puzzling one. Instead, we should insist always on specifying with what "real" is being contrasted—not what I shall have to show it is, in order to show it is "real"; and then usually we shall find some specific, less fatal word, appropriate to the particular case, to substitute for "real."

Knowing it's a "real" goldfinch isn't in question in the ordinary case when I say I know it's a goldfinch; reasonable precautions only are taken. But when it *is* called in question, in *special* cases, then I make sure it's a real goldfinch in ways essentially similar to those in which I made sure it was a goldfinch, though corroboration by other witnesses plays a specially important part in some cases. Once again the precautions cannot be more than reasonable, relative to current intents and purposes. And once again, in the special cases just as in the ordinary cases, two further conditions hold good:

(a) I don't by any means *always* know whether it's one or not. It may fly away before I have a chance of testing it, or of inspecting it thoroughly enough. This is simple enough; yet some are prone to argue that because I *sometimes* don't know or can't discover, I *never* can.

8. Conjurers, too, trade on this. "Will some gentleman kindly satisfy himself that this is a perfectly ordinary hat?" This leaves us baffled and uneasy: sheepishly we agree that it seems all right, while conscious that we haven't the least idea what to guard against.

(b) "Being sure it's real" is no more proof against miracles or outrages of nature than anything else is or, *sub specie humanitatis*, can be. If we have made sure it's a goldfinch, and a real goldfinch, and then in the future it does something outrageous (explodes, quotes Mrs. Woolf, or what not), we don't say we were wrong to say it was a goldfinch, *we don't know what to say*. Words literally fail us: "What would you have said?" "What are we to say now?" "What would *you* say?" When I have made sure it's a real goldfinch (not stuffed, corroborated by the disinterested, etc.) then I am *not* "predicting" in saying it's a real goldfinch, and in a very good sense I can't be proved wrong whatever happens. It seems a serious mistake to suppose that language (or most language, language about real things) is "predictive" in such a way that the future can always prove it wrong. What the future *can* always do, is to make us *revise our ideas* about goldfinches or real goldfinches or anything else.

Perhaps the normal procedure of language could be schematized as follows. First, it is arranged that, on experiencing a complex of features C, then we are to say "This is C" or "This is a C." Then subsequently, the occurrence either of the whole of C or of a significant and characteristic part of it is, on one or many occasions, accompanied or followed in definite circumstances by another special and distinctive feature or complex of features, which makes it seem desirable to revise our ideas: so that we draw a distinction between "This looks like a C, but in fact is only a dummy, etc." and "This is a real C (live, genuine, etc.)." *Henceforward*, we can only ascertain that it's a *real* C by ascertaining that the special feature or complex of features is present in the appropriate circumstances. The old expression "This is a C" will tend as heretofore, to fail to draw any distinction between "real, live, etc.," and "dummy, stuffed, etc." If the special distinctive feature is one which does not have to manifest itself in *any* definite circumstances (on application of some specific test, after some limited lapse of time, etc.), then it is not a suitable feature on which to base a distinction between "real" and "dummy, imaginary, etc." All we can then do is to say "Some Cs are and some aren't, some do and some don't; and it may be very interesting or important whether they are or aren't, whether they do or don't, but they're all Cs, real Cs, just the same."⁹ Now if the special feature is one which must appear in (more or less) definite circumstances, then "This is a real C" is not necessarily predictive: we can, in favourable cases, make sure of it.¹⁰

9. The awkwardness about some snarks being boojums.

10. Sometimes, on the basis of the new special feature, we distinguish, not between "Cs" and "real Cs," but rather between Cs and Ds. There is a reason for choosing the one procedure rather than the other; all cases where we use the "real" formula exhibit (complicated and serpentine) likenesses, as do all cases where we use "proper," a word which behaves in many ways like "real," and is no less nor more profound.

II. SURENESS AND CERTAINTY

The other way of querying my credentials and proofs ("Are you sure it's the *right* red?") is quite different. Here we come up against Mr. Wisdom's views on "the peculiarity of a man's knowledge of his own sensations," for which he refers us to "Other Minds VII" (*Mind*, vol. LII, N.S., No. 207), a passage with which I find I disagree.

Mr. Wisdom there says that, excluding from consideration cases like "being in love" and other cases which "involve prediction," and considering statements like "I am in pain" which, in the requisite sense, do *not* involve prediction, then a man *cannot* "be wrong" in making them, in the most favoured sense of being wrong; that is, though it is of course possible for him to *lie* (so that "I am in pain" may be false), and though it is also possible for him to *misname*, i.e. to use the word "pawⁿ," say, instead of "pain," which would be liable to mislead others but would not mislead himself, either because he regularly uses "pawⁿ" for "pain" or because the use was a momentary aberration, as when I call John "Albert" while knowing him well to be John—though it is possible for him to be "wrong" in these two senses, it is not possible for him to be wrong in the most favoured sense. He says again that, with this class of statement (elsewhere called "sense-statements"), to know directly that one is in pain is "to say that one is, and to say it on the basis of being in pain"; and again, that the peculiarity of sense-statements lies in the fact that "when they are correct and made by X, then X knows they are correct."

This seems to me mistaken, though it is a view that, in more or less subtle forms, has been the basis of a very great deal of philosophy. It is perhaps the original sin (Berkeley's apple, the tree in the quad) by which the philosopher cast himself out from the garden of the world we live in.

Very clearly detailed, this is the view that, at least and only in a certain favoured type of case, I can "say what I see (or otherwise sense)" almost quite literally. On this view, if I were to say "Here is something red," then I might be held to imply or to state that it is really a red thing, a thing which would appear red in a standard light, or to other people, or tomorrow too, and perhaps even more besides; all of which "involves prediction" (if not also a metaphysical substratum). Even if I were to say "Here is something which looks red," I might still be held to imply or to state that it looks red to others also, and so forth. If, however, I confine myself to stating "Here is something that looks red to me now," then at least I can't be wrong (in the most favoured sense).

However, there is an ambiguity in "something that looks red to me now." Perhaps this can be brought out by italics, though it is not really so much a matter of emphasis as of tone and expression, of confidence and hesitancy. Contrast "Here is something that (definitely) *looks to me* (any-

how) red" with "Here is something that looks to me (something like) *red* (I should say)." In the former case I am quite confident that, however it may look to others, whatever it may "really be," etc., it certainly does look red to me at the moment. In the other case I am not confident at all; it looks reddish, but I've never seen anything quite like it before, I can't quite describe it—or, I'm not very good at recognizing colours, I never feel quite happy about them, I've constantly been caught out about them. Of course, this sounds silly in the case of "red"; red is so *very* obvious, we all know red when we see it, it's *unmistakable*.¹¹ Cases where we should not feel happy about red are not easy (though not impossible) to find. But take "magenta": "It looks rather like magenta to me—but then I wouldn't be too sure about distinguishing magenta from mauve or from heliotrope. Of course I know in a way it's purplish, but I don't really know whether to say it's magenta or not; I just can't be sure." Here, I am not interested in ruling out consideration of how it looks to others (looks *to me*) or considerations about what its *real* colour is (*looks*); what I am ruling out is *my being sure or certain* what it looks to me. Take tastes, or take sounds; these are so much better as examples than colours, because we never feel so happy with our other senses as with our eyesight. Any description of a taste or sound or smell (or colour) or of a feeling, involves (is) saying that it is like one or some that we have experienced before; any descriptive word is classificatory, involves recognition and in that sense memory, and only when we use such words (or names or descriptions, which come down to the same) are we knowing anything, or believing anything. But memory and recognition are often uncertain and unreliable.

Two rather different ways of being hesitant may be distinguished.

(a) Let us take the case where we are tasting a certain taste. We may say "I simply don't know what it is; I've never tasted anything remotely like it before . . . No, it's no use; the more I think about it the more confused I get; it's perfectly distinct and perfectly distinctive, quite unique in my experience." This illustrates the case where I can find nothing in my past experience with which to compare the current case: I'm certain it's not appreciably like anything I ever tasted before, not sufficiently like anything I know to merit the same description. This case, though distinguishable enough, shades off into the more common type of case where I'm not quite certain, or only fairly certain, or practically certain, that it's the taste of, say, laurel. In all such cases, I am endeavouring to recognize the current item by searching in my past experience for something like it, some likeness in virtue of which it deserves, more or less positively, to be described by the same descriptive word¹²; and I am meeting with varying degrees of success.

11. And yet she always *thought* his shirt was white until she saw it against Tommy's Persil-washed one.

12. Or, of course, related to it in some other way than by "similarity" (in any ordinary sense of "similarity"), which is yet sufficient reason for describing it by the same word.

(*b*) The other case is different, though it very naturally combines itself with the first. Here, what I try to do is to *savour* the current experience, to *peer* at it, to sense it vividly. I'm not sure it *is* the taste of pineapple; isn't there perhaps just *something* about it, a tang, a bite, a lack of bite, a cloying sensation, which isn't *quite* right for pineapple? Isn't there perhaps just a peculiar hint of green, which would rule out mauve and would hardly do for heliotrope? Or perhaps it is faintly odd: I must look more intently, scan it over and over: maybe just possibly there is a suggestion of an unnatural shimmer, so that it doesn't look quite like ordinary water. There is a lack of sharpness in what we actually sense, which is to be cured not, or not merely, by thinking, but by acuter discernment, by sensory discrimination (though it is of course true that thinking of other, and more pronounced, cases in our past experience can and does assist our powers of discrimination).¹³

Cases (*a*) and (*b*) alike, and perhaps usually together, lead to our being not quite sure or certain what it is, what to say, how to describe it, what our feelings really are, whether the tickling is painful exactly, whether I'm really what you'd call angry with him or only something rather like it. The hesitation is of course, in a sense, over misnaming; but I am not so much or merely worried about possibly misleading others as about misleading myself (the most favoured sense of being wrong). I should suggest that the two expressions "being certain" and "being sure," though from the nature of the case they are often used indiscriminately, have a tendency to refer to cases (*a*) and (*b*) respectively. "Being certain" tends to indicate confidence in our memories and our past discernment, "being sure" to indicate confidence in the current perception. Perhaps this comes out in our use of the concessives "to be sure" and "certainly," and in our use of such phrases as "certainly not" and "surely not." But it may be unwise to chivvy language beyond the coarser nuances.

It may be said that, even when I don't know exactly how to describe it, I nevertheless know that I *think* (and roughly how confidently I think) it's mauve. So I do know *something*. But this is irrelevant; I *don't* know it's mauve, that it definitely looks to me now mauve. Besides, there are cases where I really don't know what I think; I'm completely baffled by it.

Of course, there are any number of "sense-statements" about which I can be, and am, completely sure. In ordinary cases ordinary men are nearly always certain when a thing looks red (or reddish, or anyhow reddish rather than greenish), or when they're in pain (except when that's rather difficult to say, as when they're being tickled); in ordinary cases an expert, a dyer or a dress designer, will be quite sure when something looks (to him in the present light) reseda green or nigger brown, though those who are not experts will not be so sure. Nearly always, if not quite always, we can be

13. This appears to cover cases of dull or careless or uninstructed perception, as opposed to cases of diseased or drugged perception.

quite, or pretty, sure if we take refuge in a sufficiently *rough* description of the sensation; roughness and sureness tend to vary inversely. But the less rough descriptions, just as much as the rough, are all "sense-statements."

It is, I think, the problems of sureness and certainty, which philosophers tend (if I am not mistaken) to neglect, that have considerably exercised scientists, while the problem of "reality," which philosophers have cultivated, does not exercise them. The whole apparatus of measures and standards seems designed to combat unsureness and uncertainty, and concomitantly to increase the possible precision of language, which, in science, pays. But for the words "real" and "unreal" the scientist tends to substitute, wisely, their cash-value substitutes, of which he invents and defines an increasing number, to cover an increasing variety of cases; he doesn't ask "Is it real?" but rather "Is it denatured?" or "Is it an allotropic form?" and so on.

It is not clear to me what the class of sense-statements is, nor what its "peculiarity" is. Some who talk of sense-statements (or sense data) appear to draw a distinction between talking about simple things like red or pain, and talking about complicated things like love or tables. But apparently Mr. Wisdom does not, because he treats "This looks to me now like a man eating poppies" as in the same case with "This looks to me now red." In this he is surely right; a man eating poppies may be more "complex" to recognize, but it is often not appreciably more difficult, than the other. But if, again, we say that non-sense-statements are those which involve "prediction," why so? True, if I say "This is a (real) oasis" without first ascertaining that it's not a mirage, then I do chance my hand; but if I *have* ascertained that it's not, and can recognize for sure that it isn't (as when I am drinking its waters), then surely I'm not chancing my hand any longer. I believe, of course, that it will continue to perform as (real) oases normally do: but if there's a *lusus naturae*, a miracle, and it doesn't, that won't mean I was wrong, previously, to call it a real oasis.

With regard to Mr. Wisdom's own chosen formulae, we have seen already that it can't be right to say that the peculiarity of sense-statements is that "when they are correct, and made by *X*, then *X* knows they are correct"; for *X* may *think*, without much confidence, that it tastes to him like Lapsang, and yet be far from certain, and then subsequently become certain, or more certain, that it did or didn't. The other two formulae were: "To know that one is in pain is to say that one is and to say it on the basis of being in pain" and that the only mistake possible with sense-statements is typified by the case where "knowing him to be Jack I call him 'Alfred,' thinking his name is Alfred, or not caring a damn what his name is." The snag in both these lies in the phrases "on the basis of being in pain" and "knowing him to be Jack." "Knowing him to be Jack" means that I have recognized him as Jack, a matter over which I may well be hesitant and/or mistaken; it is true that I needn't recognize him *by name* as "Jack" (and hence I may call him "Alfred"), but at least I must be recognizing him cor-

rectly as, for instance, the man I last saw in Jerusalem, or else I *shall* be misleading *myself*. Similarly, if "on the basis of being in pain" only means "when I am (what would be correctly described as) in pain," then something more than merely *saying* "I'm in pain" is necessary for knowing I'm in pain; and this something more, as it involves recognition, may be hesitant and/or mistaken, though it is of course unlikely to be so in a case so comparatively obvious as that of pain.

Possibly the tendency to overlook the problems of recognition is fostered by the tendency to use a direct object after the word *know*. Mr. Wisdom, for example, confidently uses such expressions as "knowing the feelings of another (his mind, his sensations, his anger, his pain) in the way that *he* knows them." But, although we do correctly use the expressions "I know your feelings on the matter" or "He knows his own mind" or (archaically) "May I know your mind?" these are rather special expressions, which do not justify any general usage. "Feelings" here has the sense it has in "very strong feelings" in favour of or against something; perhaps it means "views" or "opinions" ("very decided opinions"), just as "mind" in this usage is given by the Dictionary as equivalent to "intention" or "wish." To extend the usage uncritically is somewhat as though, on the strength of the legitimate phrase "knowing someone's tastes," we were to proceed to talk of "knowing someone's sounds" or "knowing someone's taste of pineapple." If, for example, it is a case of *physical* feelings such as fatigue, we do not use the expression "I know your feelings."

When, therefore, Mr. Wisdom speaks generally of "knowing his sensations," he presumably means this to be equivalent to "knowing *what* he is seeing, smelling, etc.," just as "knowing the winner of the Derby" means "knowing *what won* the Derby." But here again, the expression "know what" seems sometimes to be taken, unconsciously and erroneously, to lend support to the practice of putting a direct object after *know*; for "what" is liable to be understood as a relative = "that which." This is a grammatical mistake: "what" *can* of course be a relative, but in "know what you feel" and "know what won" it is an interrogative (Latin *quid*, not *quod*). In this respect, "I can smell what he is smelling" differs from "I can know what he is smelling." "I know what he is feeling" is not "There is an *x* which both I know and he is feeling," but "I know the answer to the question 'What is he feeling?'" And similarly with "I know what I am feeling"; this does *not* mean that there is something which I am *both knowing and feeling*.

Expressions such as "We don't know another man's anger in the way he knows it" or "He knows his pain in a way we can't" seem barbarous. The man doesn't "know his pain"; he feels (not knows) what he recognizes as, or what he knows to be, anger (not his anger), and he knows that he is feeling angry. Always assuming that he does recognize the feeling, which in fact, though feeling it acutely, he may not: "Now I know what it was, it was jealousy (or gooseflesh or angina). At the time I didn't know at all what

it was, I had never felt anything quite like it before: but since then I've got to know it quite well."¹⁴

Uncritical use of the direct object after *know* seems to be one thing that leads to the view that (or to talking as though) *sensa*, that is things, colours, noises and the rest, speak or are labelled by nature, so that I can literally *say* what (that which) I *see*: it pipes up, or I read it off. It is as if *sensa* were *literally* to "announce themselves" or to "identify themselves," in the way we indicate when we say "It presently identified itself as a particularly fine white rhinoceros." But surely this is only a manner of speaking, a reflexive idiom in which the French, for example, indulge more freely than the English; *sensa* are dumb, and only previous experience enables *us* to identify them. If we choose to say that they "identify themselves" (and certainly "recognizing" is not a highly voluntary activity of ours), then it must be admitted that they share the birthright of all speakers, that of speaking unclearly and untruly.

IF I KNOW I CAN'T BE WRONG

One final point about "How do you know?" the challenge to the user of the expression "I know," requires still to be brought out by consideration of the saying that "If you know you can't be wrong." Surely, if what has so far been said is correct, then we are often right to say we *know* even in cases where we turn out subsequently to have been mistaken—and indeed we seem always, or practically always, liable to be mistaken.

Now, we are perfectly, and should be candidly, aware of this liability, which does not, however, transpire to be so very onerous in practice. The human intellect and senses are, indeed, *inherently* fallible and delusive, but not by any means *inveterately* so. Machines are inherently liable to break down, but good machines don't (often). It is futile to embark on a "theory of knowledge" which denies this liability; such theories constantly end up by admitting the liability after all, and denying the existence of "knowledge."

"When you know you can't be wrong" is perfectly good sense. You are prohibited from saying "I know it is so, but I may be wrong," just as you are prohibited from saying "I promise I will, but I may fail." If you are aware you may be mistaken, you oughtn't to say you know, just as, if you are aware you may break your word, you have no business to promise. But of course, being aware that you may be mistaken doesn't mean merely being aware that you are a fallible human being; it means that you have some con-

14. There are, of course, legitimate uses of the direct object after *know*, and of the possessive pronoun before words for feelings. "He knows the town well," "He has known much suffering," "My old vanity, how well I know it!"—even the pleonastic "Where does he feel his (= the) pain?" and the educative tautology "*He feels his pain.*" But none of these really lends support to the metaphysical "He knows his pain (in a way we can't)."

crete reason to suppose that you may be mistaken in this case. Just as "but I may fail" doesn't mean merely "but I am a weak human being" (in which case it would be no more exciting than adding "D.V."); it means that there is some concrete reason for me to suppose that I shall break my word. It is naturally *always* possible ("humanly" possible) that I may be mistaken or may break my word, but that by itself is no bar against using the expressions "I know" and "I promise" as we do in fact use them.

At the risk (long since incurred) of being tedious, the parallel between saying "I know" and saying "I promise" may be elaborated.¹⁵

When I say "*S* is *P*," I imply at least that I believe it, and, if I have been strictly brought up, that I am (quite) sure of it; when I say "I shall do *A*," I imply at least that I hope to do it, and, if I have been strictly brought up that I (fully) intend to. If I only believe that *S* is *P*, I can add "But of course I may (very well) be wrong"; if I only hope to do *A*, I can add "But of course I may (very well) not." When I only believe or only hope, it is recognized that further evidence or further circumstances are liable to make me change my mind. If I say "*S* is *P*" when I don't even believe it, I am lying; if I say it when I believe it but am not sure of it, I may be misleading but I am not exactly lying. If I say "I shall do *A*" when I have not even any hope, not the slightest intention, of doing it, then I am deliberately deceiving; if I say it when I do not fully intend to, I am misleading but I am not deliberately deceiving in the same way.

But now, when I say "I promise," a new plunge is taken; I have not merely announced my intention, but, by using this formula (performing this ritual), I have bound myself to others, and staked my reputation, in a new way. Similarly, saying "I know" is taking a new plunge. But it is *not* saying "I have performed a specially striking feat of cognition, superior, in the same scale as believing and being sure, even to being merely quite sure"; for there *is* nothing in that scale superior to being quite sure. Just as promising is not something superior, in the same scale as hoping and intending, even to merely fully intending; for there *is* nothing in that scale superior to fully intending. When I say "I know," *I give others my word; I give others my authority for saying that "S is P."*

When I have said only that I am sure, and prove to have been mistaken, I am not liable to be rounded on by others in the same way as when I have said "I know." I am sure *for my part*, you can take it or leave it; accept

15. It is the use of the expressions "I know" and "I promise" (first person singular, present indicative tense) alone that is being considered. "If I knew, I can't have been wrong" or "If she knows she can't be wrong" are not worrying in the way that "If I (you) know I (you) can't be wrong" is worrying. Or again, "I promise" is quite different from "he promises": if I say "I promise," I don't say *I say* I promise, *I promise*, just as if he says he promises, he doesn't say he says he promises, he promises; whereas if I say "he promises," I do (only) say he *says* he promises—in the other "sense" of "promise," the "sense" in which *I* say *I* promise, only *he* can say he promises. I *describe* his promising, but I *do* my own promising and he must do *his* own.

it if you think I'm an acute and careful person, that's your responsibility. But I don't know "for my part," and when I say "I know" I don't mean you can take it or leave it (though of course you *can* take it or leave it). In the same way when I say I fully intend to, I do so for my part, and, according as you think highly or poorly of my resolution and chances, you will elect to act on it or not to act on it: but if I say I promise, you are *entitled* to act on it, whether or not you choose to do so. If I have said I know or I promise, you insult me in a special way by refusing to accept it. We all *feel* the very great difference between saying even "I'm *absolutely* sure" and saying "I know"; it is like the difference between saying even "I firmly and irrevocably intend" and "I promise." If someone has promised me to do *A*, then I am entitled to rely on it, and can myself make promises on the strength of it: and so, where someone has said to me "I know," I am entitled to say *I* know too, at second hand. The right to say "I know" is transmissible, in the sort of way that other authority is transmissible. Hence, if I say it lightly, I may be *responsible* for getting you into trouble.

If you say you *know* something, the most immediate challenge takes the form of asking "Are you in a position to know?" that is, you must undertake to show, not merely that you are sure of it but that it is within your cognizance. There is a similar form of challenge in the case of promising; fully intending is not enough—you must also undertake to show that "you are in a position to promise," that is that it is within your power. Over these points in the two cases parallel series of doubts are apt to infect philosophers, on the ground that I cannot foresee the future. Some begin to hold that I should never, or practically never, say I know anything—perhaps only what I am sensing at this moment: others, that I should never, or practically never, say I promise—perhaps only what is actually within my power at this moment. In both cases there is an obsession: if I know *I can't be wrong*, so I can't have the right to say I know, and if I promise *I can't fail*, so I can't have the right to say I promise. And in both cases this obsession fastens on my inability to make *predictions* as the root of the matter, meaning by predictions claims to know the future. But this is doubly mistaken in both cases. As has been seen, we may be perfectly justified in saying we know or we promise, in spite of the fact that things "may" turn out badly, and it's a more or less serious matter for us if they do. And further, it is overlooked that the conditions which must be satisfied if I am to show that a thing is within my cognizance or within my power are conditions, not about the future, but about *the present and the past*: it is not demanded that I do more than *believe* about the future.¹⁶

We feel, however, an objection to saying that "I know" performs the same sort of function in talking as "I promise." It is this. Supposing that

16. If "Figs never grow on thistles" is taken to mean "None ever have and none ever will," then it is implied that I *know* that none ever have, but only that I *believe* that none ever will.

things turn out badly, then we say, on the one hand "You're proved wrong, so you *didn't* know," but on the other hand "You've failed to perform, although you *did* promise." I believe that this contrast is more apparent than real. The sense in which you "did promise" is that you did *say* you promised (did say "I promise"); and you did *say* you knew. That is the gravamen of the charge against you when you let us down, after we have taken your word. But it may well transpire that you never fully intended to do it, or that you had concrete reason to suppose that you wouldn't be able to do it (it might even be manifestly impossible), and in another "sense" of promise you *can't* then have promised to do it, so that you *didn't* promise.

Consider the use of other phrases analogous to "I know" and "I promise." Suppose, instead of "I know," I had said "I swear"; in that case, upon the opposite appearing, we should say, exactly as in the promising case, "You *did* swear, but you were wrong." Suppose again that, instead of "I promise," I had said "I guarantee" (e.g. to protect you from attack); in that case, upon my letting you down, you can say, exactly as in the knowing case "You *said* you guaranteed it, but you *didn't* guarantee it."¹⁷ Can the situation perhaps be summed up as follows? In these "ritual" cases, the approved case is one where, *in the appropriate circumstances*, I say a certain formula: e.g. "I do" when standing, unmarried or a widower, beside a woman, unmarried or a widow and not within the prohibited degrees of relationship, before a clergyman, registrar, etc., or "I give" when it is mine to give, etc., or "I order" when I have the authority to, etc. But now, if the situation transpires to have been in some way not orthodox (I was already married; it wasn't mine to give; I had no authority to order), then we tend to be rather hesitant about how to put it, as heaven was when the saint blessed the penguins. We call the man a bigamist, but his second marriage was not a marriage, is null and void (a useful formula in many cases for avoiding saying either "he did" or "he didn't"); he did "order" me to do it, but, having no authority over me, he *couldn't* "order" me; he did warn me it was going to charge, but it wasn't or anyway I knew much more about it than he did, so in a way he couldn't warn me, didn't warn me.¹⁸ We hesitate between "He didn't order me," "He had no right to order me," "He oughtn't to have said he ordered me," just as we do between "You didn't know," "You can't have known," "You had no right to say you knew" (these perhaps having slightly different nuances, according to what precisely it is that has gone wrong).

17. "Swear," "guarantee," "give my word," "promise," all these and similar words cover cases both of "knowing" and of "promising," thus suggesting the two are analogous. Of course they differ subtly from each other: for example, *know* and *promise* are in a certain sense "unlimited" expressions, while when I *swear* I swear *upon* something, and when I guarantee I guarantee that, upon some adverse and more or less to be expected circumstance arising, I will take *some more or less definite action* to nullify it.

18. "You can't warn someone of something that isn't going to happen" parallels "You can't know what isn't true."

But the essential factors are (a) You said you knew; you said you promised, (b) You were mistaken; you didn't perform. The hesitancy concerns only the precise way in which we are to round on the original "I know" or "I promise."

To suppose that "I know" is a descriptive phrase, is only one example of the *descriptive fallacy*, so common in philosophy. Even if some language is now purely descriptive, language was not in origin so, and much of it is still not so. Utterance of obvious ritual phrases, in the appropriate circumstances, is not *describing* the action we are doing, but *doing* it ("I do"); in other cases it functions, like tone and expression, or again like punctuation and mood, as an intimation that we are employing language in some special way ("I warn," "I ask," "I define"). Such phrases cannot, strictly, *be* lies, though they can "imply" lies, as "I promise" implies that I fully intend, which may be untrue.

If these are the main and multifarious points that arise in familiar cases where we ask "How do you know that this is a case of so-and-so?" they may be expected to arise likewise in case where we say "I know he is angry." And if there are, as no doubt there are, special difficulties in this case, at least we can clear the ground a little of things which are not special difficulties, and get the matter in better perspective.

As a preliminary, it must be said that I shall only discuss the question of feelings and emotions, with special reference to anger. It seems likely that cases where we know that another man thinks that 2 and 2 make 4, or that he is seeing a rat, and so on, are different in important respects from, though no doubt also similar to, the case of knowing that he is angry or hungry.

In the first place, we certainly do say sometimes that we know another man is angry, and we also distinguish these occasions from others on which we say only that we *believe* he is angry. For of course, we do not for a moment suppose that we *always* know, of *all* men, whether they are angry or not, or that we could discover it. There are many occasions when I realize that I can't possibly tell what he's feeling; and there are many *types* of people, and many individuals too, with whom I (they being what they are, and I being what I am) never can tell. The feelings of royalty, for example, or fakirs or bushmen or Wykehamists or simple eccentrics—these may be very hard to divine; unless you have had a prolonged acquaintance with such persons, and some intimacy with them, you are not in any sort of position to know what their feelings are, especially if, for one reason or another, they can't or don't tell you. Or again, the feelings of some individual whom you have never met before—they might be almost anything; you don't know his character at all or his tastes, you have had no experience of his mannerisms, and so on. His feelings are elusive and personal; people

differ so much. It is this sort of thing that leads to the situation where we say "You never know" or "You never can tell."

In short, here even more than in the case of the goldfinch, a great deal depends on how familiar we have been in our past experience with this type of person, and indeed with this individual, in this type of situation. If we have no great familiarity, then we hesitate to say we know; indeed, we can't be expected to say (tell). On the other hand, if we *have* had the necessary experience, then we can, in favourable current circumstances, say we know: we certainly can recognize when some near relative of ours is angrier than we have ever seen him.

Further, we must have had experience also of the emotion or feeling concerned, in this case anger. In order to know what you're feeling, I must also apparently be able to imagine (guess, understand, appreciate) what you're feeling. It seems that more is demanded than that I shall have learned to discriminate displays of anger in others; I must also have been angry myself.¹⁹ Or at any rate, if I have never felt a certain emotion, say ambition, then I certainly feel an *extra* hesitation in saying that his motive is ambition. And this seems to be due to the very special nature (grammar, logic) of feelings, to the special way in which they are related to their occasions and manifestations, which requires further elucidation.

At first sight it may be tempting to follow Mr. Wisdom, and to draw a distinction between (1) the physical symptoms and (2) the feeling. So that when, in the current case, I am asked "How can you tell he's angry?" I should answer "From the physical symptoms," while if *he* is asked how *he* can tell he's angry, he should answer "From the feeling." But this seems to be a dangerous over-simplification.

In the first place, "symptoms" (and also "physical") is being used in a way different from ordinary usage, and one which proves to be misleading.

"Symptoms," a term transferred from medical usage,²⁰ tends to be used only, or primarily, in cases where that of which there are symptoms is something undesirable (of incipient disease rather than of returning health, of despair rather than of hope, of grief rather than of joy); and hence it is more colourful than "signs" or "indications." This, however, is comparatively trivial. What is important is the fact that we never talk of "symptoms" or "signs" except *by way of implied contrast with inspection of the item it-*

19. We say we don't know what it must feel like to be a king, whereas we do know what one of our friends must have felt when mortified. In this ordinary (imprecise and evidently not whole-hog) sense of "knowing what it would be like" we do often know what it would be like to be our neighbour drawing his sword, whereas we don't know (can't even guess or imagine), really, what it would feel like to be a cat or a cockroach. But of course we don't ever "know" what in our neighbour accompanies the drawing of his sword in Mr. Wisdom's peculiar sense of "know what" as equivalent to "directly experience that which."

20. Doctors nowadays draw a distinction of their own between "symptoms" and "(physical) signs"; but the distinction is not here relevant, and perhaps not very clear.

self. No doubt it would often be awkward to have to say exactly where the signs or symptoms end and the item itself begins to appear; but such a division is always implied to exist. And hence the words "symptom" and "sign" have no use except in cases where the item, as in the case of disease, is liable to be *hidden*, whether it be in the future, in the past, under the skin, or in some other more or less notorious casket; and when the item is itself before us, we no longer talk of signs and symptoms. When we talk of "signs of a storm," we mean signs of an impending storm, or of a past storm, or of a storm beyond the horizon; we do *not* mean a storm on top of us.²¹

The words function like such words as "traces" or "clues." Once you know the murderer, you don't get any more clues, only what were or would have been clues; nor is a confession, or an eyewitness' view of the crime, a particularly good clue—these are something different altogether. When the cheese is not to be found or seen, then there may be traces of it, but not when it's there in front of us (though of course, there aren't, then, "no traces" of it either).

For this reason, it seems misleading to lump together, as a general practice, all the characteristic features of any casual item as "signs" or "symptoms" of it; though it is of course sometimes the case that some things which could in appropriate circumstances be called characteristics or effects or manifestations or parts or sequelae or what not of certain items may *also* be called signs or symptoms of those items in the appropriate circumstances. It seems to be this which is really wrong with Mr. Wisdom's paradox about looking in the larder and finding "all the signs" of bread, when we see the loaf, touch it, taste it and so on. Doing these things is not finding (some) signs of bread at all; the taste or feel of bread is not a sign or symptom of bread at all. What I might be taken to mean if I announced that I had found signs of bread in the larder seems rather doubtful, since bread is not normally casketed (or if in the bin, leaves no traces), and not being a transient event (impending bread, etc.), does not have any normally accepted "signs"; and signs, peculiar to the item, have to be more or less normally accepted. I might be taken to mean that I had found traces of bread, such as crumbs, or signs that bread had at one time been stored there, or something of the kind; but what I could *not* be taken to mean is that I had seen, tasted, or touched (something like) bread.

The sort of thing we do actually say, if the look is all right but we haven't yet tasted it, is "Here is something that looks like bread." If it turns out not to

21. There are some, more complicated, cases like that of inflation, where the signs of incipient inflation are of the same nature as inflation itself, but of a less intensity or at a slower tempo. Here, especially, it is a matter for decision where the signs or "tendencies" end and where the state itself sets in; moreover, with inflation as with some diseases, we can in some contexts go on talking of signs or symptoms even when the item itself is quite fairly decidedly present, because it is such as not to be patent to simple observation.

be bread after all, we might say "It tasted like bread, but actually it was only bread-substitute," or "It exhibited many of the characteristic features of bread, but differed in important respects; it was only a synthetic imitation." That is, we don't use the words sign or symptom at all.

Now, if "signs" and "symptoms" have this restricted usage, it is evident that to say that we only get at the "signs" or "symptoms" of anything is to imply that we never get at *it* (and this goes for "*all* the signs" too). So that, if we say that I only get at the *symptoms* of his anger, that carries an important implication. But *is* this the way we do talk? Surely we do not consider that we are never aware of more than *symptoms* of anger in another man?

"Symptoms" or "signs" of anger tend to mean signs of *rising* or of *suppressed* anger. Once the man has exploded, we talk of something different—of an expression or manifestation or display of anger, of an exhibition of temper, and so forth. A twitch of the eyebrow, pallor, a tremor in the voice, all these may be symptoms of anger: but a violent tirade or a blow in the face are not, they are the acts in which the anger is vented. "Symptoms" of anger are not, at least normally, contrasted with the man's own inner personal feeling of anger, but rather with the actual display of anger. Normally at least, where we have only symptoms to go upon, we should say only that we *believe* that the man is angry or getting angry; whereas when he has given himself away we say that we *know*.²²

The word "physical" also, as used by Mr. Wisdom in contrast to "mental," seems to me abused, though I am not confident as to whether this abuse is misleading in the current case. He evidently does not wish to call a man's feelings, which he cites as a typical example of a "mental" event, *physical*. Yet this is what we ordinarily often do. There are many physical feelings, such as giddiness, hunger or fatigue; and these are included by some doctors among the physical signs of various complaints. Most feelings we do not speak of as either mental or physical, especially emotions, such as jealousy or anger itself; we do not assign them to the *mind* but to the *heart*. Where we do describe a feeling as mental, it is because we are using a word normally used to describe a physical feeling in a special transferred sense, as when we talk about "mental" discomfort or fatigue.

22. Sometimes, it is said, we use "I know" where we should be prepared to substitute "I believe," as when we say "I know he's in, because his hat is in the hall": thus "know" is used loosely for "believe," so why should we suppose there is a fundamental difference between them? But the question is, what exactly do we mean by "prepared to substitute" and "loosely"? We are "prepared to substitute" *believe* for *know* not as an *equivalent* expression but as a weaker and therefore preferable expression, in view of the seriousness with which, as has become apparent, the matter is to be treated; the presence of the hat, which would serve as a proof of its owner's presence in many circumstances, could only through laxity be adduced as a proof in a court of law.

It is then, clear, that more is involved in being e.g., angry than simply showing the symptoms and feeling the feeling. For there is also the display or manifestation. And it is to be noted that the feeling is related in a unique sort of way to the display. When we are angry, we have an impulse, felt and/or acted on, to do actions of particular kinds, and, unless we suppress the anger, we do actually proceed to do them. There is a peculiar and intimate relationship between the emotion and the natural manner of venting it, with which, having been angry ourselves, we are acquainted. The ways in which anger is normally manifested are *natural* to anger just as there are tones *naturally* expressive of various emotions (indignation, etc.). There is not normally taken to be²³ such a thing as "being angry" apart from any impulse, however vague, to vent the anger in the natural way.

Moreover, besides the natural expressions of anger, there are also the natural *occasions* of anger, of which we have also had experience, which are similarly connected in an intimate way with the "being angry." It would be as nonsensical to class these as "causes" in some supposedly obvious and "external" sense, as it would be to class the venting of anger as the "effect" of the emotion in a supposedly obvious and "external" sense. Equally it would be nonsensical to say that there are three wholly distinct phenomena, (1) cause or occasion (2) feeling or emotion and (3) effect or manifestation, which are related together "by definition" as all necessary to anger, though this would perhaps be less misleading than the other.

It seems fair to say that "being angry" is in many respects like "having mumps." It is a description of a whole pattern of events, including occasion, symptoms, feeling and manifestation, and possibly other factors besides. It is as silly to ask "What, really, *is* the anger *itself*?" as to attempt to fine down "the disease" to some one chosen item ("the functional disorder"). That the man himself feels something which we don't (in the sense that he feels angry and we don't) is²⁴ evident enough, and incidentally nothing to complain about as a "predicament"; but there is no call to say that "that" ("the

23. A new language is naturally necessary if we are to admit unconscious feelings, and feelings which express themselves in paradoxical manners, such as the psychoanalysts describe.

24. In the absence of Mr. Wisdom's variety of telepathy. [Professor Wisdom wrote: "Likewise we can imagine a man doing what we now can seldom do, something which people have called 'looking into the mind of another.' This man doesn't examine present symptoms and predict how the patient will go on. He sees scenes in a glass or in his mind's eye and knows they are what another sees, he feels distress and knows that another is in distress. If this is to be called seeing what another sees or feeling what he feels, if this would be real knowledge of the thoughts and feelings of another, then when someone says 'We cannot know the feelings of others' what he refers to is the familiar fact that few of us can do this"—ED.] There is, it seems to me, something which does actually happen, rather different from Mr. Wisdom's telepathy, which does sometimes contribute towards our knowledge of other people's feelings. We do talk, e.g. of "feeling another person's displeasure," and say, e.g. "his anger could be felt," and there seems to be something genuine about this. But the feeling we feel, though genuine "feeling," is *not*, in these cases, displeasure or anger, but a special *counterpart* feeling.

feeling")²⁵ is the *anger*. The pattern of events, whatever its precise form is, fairly clearly, peculiar to the case of "feelings" (emotions)—it is not by any means exactly like the case of diseases; and it seems to be this peculiarity which makes us prone to say that, unless we have had experience of a feeling ourselves, we cannot know when someone else is experiencing it. Moreover, it is our confidence in the general pattern that makes us apt to say we "know" another man is angry when we have only observed parts of the pattern; for the parts of the pattern are related to each other very much more intimately than, e.g. newspapermen scurrying in Brighton are related to a fire in Fleet Street.²⁶

The man himself, such is the overriding power of the pattern, will sometimes accept corrections from outsiders about his own emotions, i.e. about the correct description of them. He may be got to agree that he was not really angry so much as, rather, indignant or jealous, and even that he was not in pain, but only fancied he was. And this is not surprising, especially in view of the fact that he, like all of us, has primarily learnt to use the expression "I am angry" of himself by (a) noting the occasion, symptoms, manifestation, etc., in cases where other persons say "I am angry" of *themselves* (b) being told by others, who have noted all that can be observed about *him* on certain occasions, that "You are angry," i.e. that he should say "I am angry." On the whole, "mere" feelings or emotions, if there are such things genuinely detectable, are certainly very hard to be sure about, even harder than, say, tastes, which we already choose to describe, normally, only by their occasions (the taste "of tar," "of pineapple," etc.).

All words for emotions are, besides, on the vague side, in two ways, leading to further hesitations about whether we "know" when he's angry. They tend to cover a rather wide and ill-defined variety of situations; and the patterns they cover tend to be, each of them, rather complex (though common and so not difficult to recognize, very often), so that it is easy for one of the more or less necessary features to be omitted, and thus to give rise to hesitation about what exactly we should say in such an unorthodox case. We realize, well enough, that the challenge to which we are exposed if we say we *know* is to *prove* it, and in this respect vagueness of terminology is a crippling handicap.

So far, enough has perhaps been said to show that most of the difficulties which stand in the way of our saying we know a thing is a goldfinch arise in rather greater strength in the case where we want to say we know another man is angry. But there is still a feeling, and I think a justified feeling, that there is a further and quite *special* difficulty in the latter case.

This difficulty seems to be of the sort that Mr. Wisdom raises at the very

25. The "feelings," i.e. sensations, we can observe in ourselves when angry are such things as a pounding of the heart or tensing of the muscles, which cannot in themselves be justifiably called "the feeling of anger."

26. It is therefore misleading to ask "How do I get from the scowl to the anger?"

outset of his series of articles on "Other Minds." It is asked, might the man not exhibit all the symptoms (and display and everything else) of anger, even *ad infinitum*, and yet still *not* (really) *be* angry? It will be remembered that he there treats it, no doubt provisionally, as a difficulty similar to that which can arise concerning the reality of any "material object." But in fact, it has special features of its own.

There seem to be three distinguishable doubts which may arise:

(1) When to all appearances angry, might he not really be labouring under some other emotion, in that, though he normally feels the same emotion as we should on occasions when we, in his position, should feel anger and in making displays such as we make when angry, in this particular case he is acting abnormally?

(2) When to all appearances angry, might he not really be labouring under some other emotion; in that he normally feels, on occasions when we in his position should feel anger, and when acting as we should act if we felt anger, some feeling which we, if we experienced it, should distinguish from anger?

(3) When to all appearances angry, might he not really be feeling no emotion at all?

In everyday life, all these problems arise in special cases, and occasion genuine worry. We may worry (1) as to whether someone is *deceiving* us, by suppressing his emotions, or by feigning emotions which he does not feel; we may worry (2) as to whether we are *misunderstanding* someone (or he us), in wrongly supposing that he does "feel like us," that he does share emotions like ours; or we may worry (3) as to whether some action of another person is really deliberate, or perhaps only involuntary or inadvertent in some manner or other. All three varieties of worry may arise, and often do, in connection with the actions of persons whom we know very well.²⁷ All work together in the feeling of loneliness which affects everybody at times. Any or all of them may be at the bottom of the passage from Mrs. Woolf.²⁸

None of these three special difficulties about "reality" arises in connection with goldfinches or bread, any more than the special difficulties about, e.g. the oasis arise in connection with the reality of another person's emotions. The goldfinch cannot be assumed, nor the bread suppressed; we may be deceived by the appearance of an oasis, or misinterpret the signs of the weather, but the oasis cannot lie to us and we cannot misunderstand the storm in the way we misunderstand the man.

Though the difficulties are special, the ways of dealing with them are,

27. There is, too, a special way in which we can doubt the "reality" of our own emotions, can doubt whether we are not "acting to ourselves." Professional actors may reach a state where they never really know what their genuine feelings are.

28. [Professor Wisdom had quoted a paragraph from *Jacob's Room*—ED.]

initially, similar to those employed in the case of the goldfinch. There are (more or less roughly) established procedures for dealing with suspected cases of deception or of misunderstanding or of inadvertence. By these means we do very often establish (though we do not expect *always* to establish) that someone is acting, or that we were misunderstanding him, or that he is simply impervious to a certain emotion, or that he was not acting voluntarily. These special cases, where doubts arise and require resolving, are contrasted with the normal cases which hold the field²⁹ *unless* there is some special suggestion that deceit, etc., is involved, and deceit, moreover, of an intelligible kind in the circumstances, that is, of a kind that can be looked into because motive, etc., is specially suggested. There is no suggestion that I *never* know what other people's emotions are, nor yet that in particular cases I might be wrong for no special reason or in no special way.

Extraordinary cases of deceit, misunderstanding, etc. (which are themselves not the normal), do not, *ex vi termini*, ordinarily occur; we have a working knowledge of the occasions for, the temptations to, the practical limits of, and the normal types of deceit and misunderstanding. Nevertheless, they *may* occur, and there may be varieties which are common without our yet having become aware of the fact. If this happens, we are in a certain sense wrong, because our terminology is inadequate to the facts, and we shall have thenceforward to be more wary about saying we know, or shall have to revise our ideas and terminology. This we are constantly ready to do in a field so complex and baffling as that of the emotions.

There remains, however, one further special feature of the case, which also differentiates it radically from the goldfinch case. The goldfinch, the material object, is, as we insisted above, uninscribed and *mute*; but the man *speaks*. In the complex of occurrences which induces us to say we know another man is angry, the complex of symptoms, occasion, display and the rest, a peculiar place is occupied by the man's own statement as to what his feelings are. In the usual case, we accept this statement without question, and we then say that we know (as it were "at second-hand") what his feelings are; though of course "at second-hand" here could not be used to imply that anybody but he could know "at first-hand," and hence perhaps it is not in fact used. In unusual cases, where his statement conflicts with the description we should otherwise have been inclined to give of the case, we do not feel bound to accept it, though we always feel some uneasiness in rejecting it. If the man is a habitual liar or self-deceiver, or if there are patent reasons why he should be lying or deceiving himself on this occasion, then we feel reasonably happy; but if such a case occurred as the imagined one³⁰ where a man, having given throughout life every appearance of holding a certain

29. "You cannot fool all the people all of the time" is "analytic."

30. [Professor Wisdom had considered the case of a man who persistently claimed that he believed that flowers feel—ED.]

pointless belief, leaves behind a remark in his private diary to the effect that he never did believe it, then we probably should not know what to say.

I should like to make in conclusion some further remarks about this crucial matter of our believing what the man says about his own feelings. Although I know very well that I do not see my way clearly in this, I cannot help feeling sure that it is fundamental to the whole Predicament, and that it has not been given the attention it deserves, possibly just because it is so obvious.

The man's own statement is not (is not treated primarily as) a sign or symptom, although it can, secondarily and artificially, be treated as such. A unique place is reserved for it in the summary of the facts of the case. The question then is: "Why believe him?"

There are answers that we can give to this question, which is here to be taken in the general sense of "Why believe him ever?" not simply as "Why believe him this time?" We may say that the man's statements on matters other than his own feelings have constantly been before us in the past, and have been regularly verified by our own observations of the facts he reported; so that we have in fact some basis for an induction about his general reliability. Or we may say that his behaviour is most simply "explained" on the view that he does feel emotions like ours, just as psycho-analysts "explain" erratic behaviour by analogy with normal behaviour when they use the terminology of "unconscious desires."

These answers are, however, dangerous and unhelpful. They are so obvious that they please nobody; while on the other hand they encourage the questioner to push his question to "profounder" depths, encouraging us, in turn, to exaggerate these answers until they become distortions.

The question, pushed further, becomes a challenge to the very possibility of "believing another man," in its ordinarily accepted sense, at all. What "justification" is there for supposing that there is another mind communicating with you at all? How can you know what it would be like for another mind to feel anything, and so how can you understand it? It is then that we are tempted to say that we only mean by "believing him" that we take certain vocal noises as signs of certain impending behaviour, and that "other minds" are no more really real than unconscious desires.

This, however, is distortion. It seems, rather, that believing in other persons, in authority and testimony, is an essential part of the act of communicating, an act which we all constantly perform. It is as much an irreducible part of our experience as, say, giving promises, or playing competitive games, or even sensing coloured patches. We can state certain advantages of such performances, and we can elaborate rules of a kind for their "rational" conduct (as the Law Courts and historians and psychologists work out the rules for accepting testimony). But there is no "justification" for our doing them as such.

FINAL NOTE

One speaker at Manchester³¹ said roundly that the real crux of the matter remains still that "I ought not to say that I know Tom is angry, because I don't introspect his feelings"; and this no doubt is just what many people do boggle at. The gist of what I have been trying to bring out is simply:

(1) *Of course* I *don't* introspect Tom's feelings (we should be in a pretty predicament if I did).

(2) *Of course* I *do* sometimes know Tom is angry.

Hence

(3) to suppose that the question "How do I know that Tom is angry?" is meant to mean "How do I introspect Tom's feelings?" (because, as we know, that's the sort of thing that knowing is or ought to be), is simply barking our way up the wrong gum tree.

31. [Where the Symposium was held—ED.]

Sensation and Observation

by **GILBERT RYLE**

(1) FOREWORD

One of the central negative motives of this book is to show that "mental" does not denote a status, such that one can sensibly ask of a given thing or event whether it is mental or physical, "in the mind" or "in the outside world." To talk of a person's mind is not to talk of a repository which is permitted to house objects that something called "the physical world" is forbidden to house; it is to talk of the person's abilities, liabilities and inclinations to do and undergo certain sorts of things, and of the doing and undertaking of these things in the ordinary world. Indeed, it makes no sense to speak as if there could be two or eleven worlds. Nothing but confusion is achieved by labelling worlds after particular avocations. Even the solemn phrase "the physical world" is as philosophically pointless as would

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be the phrase "the numismatic world," "the haberdashery world," or "the botanical world."

But it will be urged in defence of the doctrine that "mental" does denote a status that a special footing must be provided for sensations, feelings and images. The laboratory sciences provide descriptions and correlations of various kinds of things and processes, but our impressions and ideas are unmentioned in these descriptions. They must therefore belong somewhere else. And as it is patent that the occurrence of a sensation, for instance, is a fact about the person who feels the pain or suffers the dazzle, the sensation must be in that person. But this is a special sense of "in," since the surgeon will not find it under the person's epidermis. So the sensation must be in the person's mind.

Moreover sensations, feelings and images are things the owner of which must be conscious of them. Whatever else may be contained in his stream of consciousness, at least his sensations, feelings and images are parts of that stream. They help to constitute, if they do not completely constitute, the stuff of which minds are composed.

Champions of this argument tend to espouse it with special confidence on behalf of images, such as what "I see in my mind's eye" and what I have "running in my head." They feel certain qualms in suggesting too radical a divorce between sensations and conditions of the body. Stomach-aches, tickles and singings in the ears have physiological attachments which threaten to sully the purity of the brook of mental experiences. But the views which I see, even when my eyes are shut, and the music and the voices that I can hear, even when all is quiet, qualify admirably for membership of the kingdom of the mind. I can, within limits, summon, dismiss and modify them at will and the location, position and condition of my body do not appear to be in any correlation with their occurrences or properties.

This belief in the mental status of images carries with it a palatable corollary. When a person has been thinking to himself, retrospection commonly shows him that at least a part of what has been going on has been a sequence of words heard in his head, as if spoken by himself. So the venerable doctrine that discoursing to oneself under one's breath is the proprietary business of minds reinforces, and is reinforced by, the doctrine that the apparatus of pure thinking does not belong to the gross world of physical noises, but consists instead of the more ethereal stuff of which dreams are made.

However, before we can discuss images, there is a lot that must be said about sensations, and this chapter is concerned entirely with the concepts of sensation and observation.

For reasons developed in its last section, I am not satisfied with this chapter. I have fallen in with the official story that perceiving involves having sensations. But this is a sophisticated use of "sensation." It is not the way in which we ordinarily use the noun "sensation," or the verb "to feel." We

ordinarily use these words for a special family of perceptions, and perceptions of temperatures, as well as for localisable pains and discomforts. Seeing, hearing, tasting and smelling do not involve sensations, in this sense of the word, any more than seeing involves hearing, or than feeling a cold draught involves tasting anything. In its sophisticated use, "sensation" seems to be a semi-physiological, semi-psychological term, the employment of which is allied with certain pseudo-scientific, Cartesian theories. This concept does not occur in what novelists, biographers, diarists or nursemaids say about people, or in what doctors, dentists or oculists say to their patients.

In its familiar, unsophisticated use, "sensation" does not stand for an ingredient in perceptions, but for a kind of perception. But, neither in its sophisticated use does it signify a notion contained in the notion of perception. People knew how to talk about seeing, hearing and feeling things, before they had mastered any physiological or psychological hypotheses, or heard of any theoretical difficulties about the communications between Minds and their Bodies.

I do not know the right idioms in which to discuss these matters, but I hope that my discussion of them in the official idioms may have at least some internal Fifth Column efficacy.

(2) SENSATIONS

For certain purposes it is convenient to divide sensations into those which enter *ex officio* into sense perception, and those which do not; that is, roughly, into those which are connected with the special organs of sense, namely the eyes, ears, tongue, nose and skin, and those which are connected with the other sensitive but non-sensory organs of the body. But this division is somewhat arbitrary. When the eye is dazzled, and when the nose stings, we incline to rank these sensations with the organic sensations of aches and prickings, and, conversely, when we have certain sensations in the throat or stomach, we are apt to say that we feel the fish-bone or the suet-pudding. A specific muscular sensation might be described indifferently as a sensation of fatigue, or as a feeling of the weight or resistance of the log, and a listener might report to one companion that he heard a very distant train, while he reported to the other that he could barely distinguish the noise from the normal throbbing or singing in his ears.

For obvious reasons we have constantly to refer to the sensations which are connected with the organs of sense, for we are constantly having to mention what we see and do not see, what we hear, smell, taste and feel. But we do not talk about these sensations "neat"; we ordinarily mention them only in reference to the things or events which we are observing or trying or claiming to observe. People speak of having a glimpse, but only in such contexts as having a glimpse of a robin, or as having a glimpse

of something moving. Nor do they break out of this habit, when asked to describe how something looked, or sounded, or tasted; they will normally say that it looked like a haystack, that it sounded like something humming, or that it tasted as if it had pepper in it.

This procedure of describing sensations by referring in a certain way to common objects like haystacks, things that hum, and pepper is of great theoretical importance. A haystack, for example, is something about the description of which everyone could agree. A haystack is something which any observers could observe, and we should expect their accounts of it to tally with one another, or at least to be capable of correction until they did tally. Its position, shape, size, weight, date of construction, composition and function are facts which anyone could establish by ordinary methods of observation and inquiry. But more than this. These methods would also establish how the haystack would look, feel and smell to ordinary observers in ordinary conditions of observation. When I say that something looks like a haystack (though it may actually be a blanket on a clothes-line), I am describing how it looks in terms of what anyone might expect a haystack to look like, when observed from a suitable angle, in a suitable light and against a suitable background. I am, that is, comparing how the blanket looks to me here and now, not with some other particular glimpse had by me, or had by some other particular person in a particular situation, but with a *type* of glimpse such as any ordinary observers could expect to get in situations of certain sorts, namely in situations where they are in the proximity of haystacks in daylight.

Similarly, to say that something tastes peppery is to say that it tastes to me now as any peppered viands would taste to anybody with a normal palate. It has been suggested that I can never know that pepper-grains do give different people similar sensations, but for the present it is enough to point out that our ordinary ways of imparting information about our own sensations consist in making certain sorts of references to what we think could be established in anyone's observations of common objects. We describe what is personal to ourselves in neutral or impersonal terms. Indeed, our descriptions would convey nothing unless couched in such terms. These are, after all, the terms which we learned by being taught them by others. We do not and cannot describe haystacks in terms of this or that set of sensations. We describe our sensations by certain sorts of references to observers and things like haystacks.

We follow the same practice in describing organic sensations. When a sufferer describes a pain as a stabbing, a grinding or a burning pain, though he does not necessarily think that his pain is given to him by a stiletto, a drill or an ember, still he says what sort of a pain it is by likening it to the sort of pain that would be given to anyone by such instruments. The same account holds of such descriptions as "there is a singing in my ears," "my blood ran cold" and "I saw stars." Even to say that one's view is hazy is to

liken one's view to the way that common objects look to any observer who is seeing them through an atmospheric haze.

The present point of mentioning these ways of describing our sensations is to show how and why there exists a linguistic difficulty in discussing the logic of concepts of sensation. We do not employ a "neat" sensation vocabulary. We describe particular sensations by referring to how common objects regularly look, sound and feel to any normal person.

Epistemologists are fond of using words like "pains," "itches," "stabs," "glows" and "dazzles" as if they were "neat" sensation names. But this practice is doubly misleading. Not only do most of these words draw their significance from situations involving common objects like fleas, daggers and radiators, but they also connote that the person who has the sensations likes or dislikes, or might well like or dislike, having them. A pain in my knee is a sensation that I mind having; so "unnoticed pain" is an absurd expression, where "unnoticed sensation" has no absurdity.

This point can serve to introduce a conceptual distinction which will shortly turn out to be of cardinal importance, namely, that between having a sensation and observing. When a person is said to be watching, scanning or looking at something, listening to it or savouring it, a part, but only a part, of what is meant is that he is having visual, auditory or gustatory sensations. But to be observing something the observer must also at least be trying to find something out. His scrutiny is accordingly describable as careful or careless, cursory or sustained, methodical or haphazard, accurate or inaccurate, expert or amateurish. Observing is a task which can be one of some arduousness, and we can be more or less successful in it and more or less good at it. But none of these ways of characterizing the exercises of one's powers of observation can be applied to the having of visual, auditory or gustatory sensations. One can listen carefully, but not have a singing in one's ears carefully; one can look systematically, but one cannot have a dazzle-sensation systematically; one can try to discriminate flavours, but one cannot try to have sensations of taste. Again we observe, very often, from inquisitiveness or obedience, but we do not have tickles from this or any other motive. We observe on purpose, but we do not have sensations on purpose, though we can induce them on purpose. We can make mistakes of observation, but it is nonsense to speak of either making or avoiding mistakes in sensation; sensations can be neither correct nor incorrect, veridical nor non-veridical. They are neither apprehensions nor misapprehensions. Observing is finding out, or trying to find out, something, but having a sensation is neither finding out, nor trying to find out, nor failing to find out, anything.

This set of contrasts enables us to say that though mention of the degree to which, the ways in which and the objects of which a person is observant or unobservant is a part of the description of his wits and character, mention of his sensory capacities and actual sensations is no part of that description.

To use an objectionable phrase, there is nothing "mental" about sensations. Deafness is not a species of stupidity, nor is a squint any sort of turpitude; the retriever's keenness of scent does not prove him intelligent; and we do not try to train or shame children out of colour-blindness or think of them as mentally defective. It is not for the moralist or the alienist, but for the oculist, to diagnose and prescribe for imperfect vision. Having a sensation is not an exercise of a quality of intellect or character. Hence we are not too proud to concede sensations to reptiles.

Whatever series of sensations an intelligent person may have, it is always conceivable that a merely sentient creature might have had a precisely similar series; and if by "stream of consciousness" were meant "series of sensations," then from a mere inventory of the content of such a stream there would be no possibility of deciding whether the creature that had these sensations was an animal or a human being; an idiot, or a lunatic or a sane man; much less whether he was an ambitious and argumentative philologist or a slow-witted but industrious magistrates' clerk.

However, these considerations will not satisfy the theorists who want to make the stream of a person's sensations, feelings and images the stuff of his mind, and thus to back up the dogma that minds are special-status things composed of a special stuff. They will urge, quite correctly, that though the oculist and the dentist can modify the patient's sensations by applying chemical or mechanical treatments to his bodily organs, yet they are debarred from observing the sensations themselves. They may observe what is physiologically amiss with the patient's eyes and gums, but they must rely on the patient's testimony for knowledge of what he sees and feels. Only the wearer knows where the shoe pinches. From this it is argued, plausibly but fallaciously, that there does indeed exist the hallowed antithesis between the public, physical world and the private, mental world, between the things and events which anyone may witness and the things or events which only their possessor may witness. Planets, microbes, nerves and eardrums are publicly observable things in the outside world; sensations, feelings and images are privately observable constituents of our several mental worlds.

I want to show that this antithesis is spurious. It is true that the cobbler cannot witness the tweaks that I feel when the shoe pinches. But it is false that I witness them. The reason why my tweaks cannot be witnessed by him is not that some Iron Curtain prevents them from being witnessed by anyone save myself, but that they are not the sorts of things of which it makes sense to say that they are witnessed or unwitnessed at all, even by me. I feel or have the tweaks, but I do not discover or peer at them; they are not things that I find out about by watching them, listening to them, or savouring them. In the sense in which a person may be said to have had a robin under observation, it would be nonsense to say that he has had a twinge under observation. There may be one of several witnesses of a road-accident; there cannot be several witnesses, or even one witness, of a qualm.

We know what it is like to have and to need observational aids like telescopes, stethoscopes and torches for the observation of planets, heart-beats and moths, but we cannot think what it would be like to apply such instruments to our sensations. Similarly though we know well what sorts of handicaps impair or prevent our observation of common objects, namely handicaps, like fogs, tingling fingers and singing in the ears, we cannot think of analogous impediments getting between us and such sensations as tingles and singing in the ears.

In saying that sensations are not the sorts of things that can be observed, I do not mean that they are unobservable in the way in which infra-microscopic bacteria, flying bullets, or the mountains on the other side of the moon, are unobservable, or that they are unobservable in the way in which the planets are unobservable to the blind. I mean something like this. Every word that can be written down, except words of one letter, has a spelling; some words are more difficult to spell than others and some words have several different spellings. Yet if we are asked how the letters of the alphabet are spelled, we have to answer that they cannot be spelled at all. But this "cannot" does not mean that the task is one of insuperable difficulty, but only that the question, "Of what letters arranged in what order does a given letter consist?" is an improper question. As letters are neither easy to spell, nor insuperably hard to spell, so, I argue, sensations are neither observable nor unobservable. Correspondingly, however, just as the fact that we may not even ask how a letter is spelled by no means precludes us from knowing perfectly well how letters are written, so the fact that we may not talk of the observation of sensations by no means precludes us from talking of the notice or heed that people can pay to their sensations, or of the avowals and reports that they can make of the sensations of which they have taken notice. Headaches cannot be witnessed, but they can be noticed and while it is improper to advise a person not to peep at his tickle, it is quite proper to advise him not to pay any heed to it.

We have seen that observing entails having sensations; a man could not be described as watching a robin who had not got a single glimpse of it, or as smelling a cheese who had not caught a whiff. (I am pretending, what is not true, that words like "glimpse" and "whiff" stand for sensations. The fact that a glimpse can be characterized as "clear" or "unclear" shows that it is an observation-word and not a "neat" sensation-word.) An object of observation, like a robin, or a cheese, must therefore be the sort of thing of which it is possible for observers to catch glimpses, or to get whiffs. But many theorists ask us to look away from such common objects as robins and cheeses towards such things as glimpses and whiffs, and we are asked to declare that I, though nobody else, can observe the glimpses and the whiffs that I get, and observe them in the same sense of "observe" as that in which anyone can observe the robin or the cheese. But to grant this would be to grant that if, when I catch a glimpse of a robin, I can observe that glimpse,

then, in doing so, I must get something like a glimpse or a whiff of that glimpse of the robin. If sensations are proper objects of observation, then observing them must carry with it the having of sensations of those sensations analogous to the glimpses of the robin without which I could not be watching the robin. And this is clearly absurd. There is nothing answering to the phrases "a glimpse of a glimpse" or "a whiff of a pain" or "the sound of a tweak" or "the tingle of a tingle," and if there was anything to correspond, the series would go on forever.

Again, when a person has been watching a horse-race, it is proper to ask whether he had a good or a bad view of it, whether he watched it carefully or carelessly and whether he tried to see as much of it as he could. So, if it was correct to say that a person observes his sensations, it would be proper to ask whether his inspection of a tickle had been hampered or unhampered, close or casual and whether he could have discerned more of it, if he had tried. No one ever asks such questions, any more than anyone else asks how the first letter in "London" is spelled. There are no such questions to ask. This point is partially obscured by the fact that the word "observe," though generally used to cover such processes as watching, listening and savouring, or else such achievements as descrying and detecting, is sometimes used as a synonym of "pay heed to" and "notice." Watching and descrying do involve paying heed, but paying heed does not involve watching.

It follows from this that it was wrong from the start to contrast the common objects of anyone's observation, like robins and cheeses, with the supposed peculiar objects of my privileged observation, namely my sensations, since sensations are not objects of observation at all. We do not, consequently, have to rig up one theatre, called "the outside world," to house the common objects of anyone's observation, and another, called "the mind," to house the objects of some monopoly observations. The antithesis between "public" and "private," was in part a misconstruction of the antithesis between objects which can be looked at, handled or tasted, on the one hand, and sensations which are had but not looked at, handled, or tasted, on the other. It is true and even tautologous that the cobbler cannot feel the shoe pinching me, unless the cobbler is myself, but this is not because he is excluded from a peep-show open only to me, but because it would make no sense to say that he was in my pain, and no sense, therefore, to say that he was noticing the tweak that I was having.

Further consequences follow. The properties which we ascertain by observation, or not without observation, to characterise the common objects of anyone's observation cannot be significantly ascribed to, or denied of, sensations. Sensations do not have sizes, shapes, positions, temperatures, colours or smells. In the sense in which there is always an answer to the question, "Where is?" or "Where was the robin?" there is no answer to the question, "Where is?" or "Where was your glimpse of the robin?" There is indeed a sense in which a tickle is quite properly said to be "in my foot,"

or a stinging "in my nose" but this is a different sense from that in which bones are in my foot, or pepper-grains are in my nose. So in the muddled sense of "world" in which people say that "the outside world" or "the public world" contains robins and cheese, the locations and connections of which in that world can be found out, there is not another world, or set of worlds, in which the locations and connections of sensations can be found out; nor does the reputed problem exist of finding out what are the connections between the occupants of the public world and those of any such private world. Further, while one common object, like a needle, can be inside or outside another, like a haystack, there is no corresponding antithesis of "inside to "outside" applying to sensations. My tweak is not hidden from the cobbler because it is inside me, either as being literally inside my skin, or as being, metaphorically, in a place to which he has no access. On the contrary, it cannot be described, as needles can, as being either internal or external to a common object like myself, nor as being either hidden or unhidden. Nor can letters be classified as either nouns or verbs or adjectives, or described as either obeying or disobeying the rules of English syntax. It is, of course, true and important that I am the only person who can give a first-hand account of the tweaks given me by my ill-fitting shoe, and an oculist who cannot speak my language is without his best source of information about my visual sensations. But the fact that I alone can give first-hand accounts of my sensations does not entail that I have, what others lack, the opportunity of observing those sensations.

Two further connected points must be made. First, there is a philosophically unexciting though important sense of "private" in which of course my sensations are private or proprietary to me. Namely, just as you cannot, in logic, hold my catches, win my races, eat my meals, frown my frowns, or dream my dreams, so you cannot have my twinges, or my after-images. Nor can Venus have Neptune's satellites, or Poland have Bulgaria's history. This is simply a part of the logical force of those sentences in which the accusative to a transitive verb is a cognate accusative. Such transitive verbs do not signify relations. "I held my catch" does not assert a relation between me and a catch, such that that catch might conceivably have been in that relation to you instead of to me. It is not like "I stopped my bicycle"; you might well have anticipated me in stopping my bicycle.

Next, in saying that "I had a twinge" does not assert a relation, as "I had a hat" does, I am saying that the phrase "my twinge" does not stand for any sort of a *thing* or "term." It does not even stand for an episode, though "I had a twinge" asserts that an episode took place. This is part of the reason why it is nonsense to speak of observing, inspecting, witnessing or scrutinizing sensations, since the objects proper to such verbs are things and episodes.

Yet when we theorise about sensations, we are forcibly tempted to talk of them as if they were elusive things or episodes. We inadvertently work on such models as that of a solitary man inside his tent who sees spots and patches of light and feels indentations in the inside of the canvas. He then, perhaps, wishes he could see and feel the torches and boots that made those

patches of light and indentations in the canvas. But, alas, he can never see those torches, or feel those boots, as the canvas is always in the way. Now illuminated and indented bits of canvas are things; and the momentary illuminations and indentations of the canvas are episodes. So they are the sorts of objects which it is proper to describe as being watched, scrutinized and detected by a man inside his tent; and it is also proper to speak of them being there, but being unwatched and undetected. Moreover a man who can watch or detect illuminated or indented canvas could watch and detect torches and boots, if they were not screened from him. The situation of a man having sensations is, therefore, quite out of analogy with that of the man in the tent. Having sensations is not watching or detecting objects; and watching and detecting things and episodes is not having them in the sense in which one has sensations.

(3) THE SENSE DATUM THEORY

It is apposite at this point to comment on a theory sometimes known as the "Sense Datum Theory." This theory is primarily an attempt to elucidate the concepts of sense perception, a part of which task consists in elucidating the notions of sensations of sight, touch, hearing, smelling and tasting.

Our everyday verbs like "see," "hear" and "taste" are not used to designate sensations "neat," for we speak of seeing horse-races, hearing trains and tasting vintage wines; and horse-races, trains and wines are not sensations. Horse-races do not stop, when I shut my eyes, and vintage wines are not obliterated, when I have catarrh. We, therefore, seem to need ways of talking about what does stop, when I shut my eyes, and what is obliterated, when I have catarrh, ways which shall not depend on mentions of common events or liquids. An apparently suitable set of nouns is easily found, since it is quite idiomatic to say that my view of the race is interrupted, when I shut my eyes, that the look or appearance of the horses is modified when tears flow, that the flavour of the wine is obliterated by catarrh, and that the noise of the train is dulled, when I stop my ears. We can, it is suggested, talk about sensations "neat" by talking about "looks," "appearances," "sounds," "flavours," "whiffs," "tingles," "glimpses" and so on. It is suggested, too, that it is necessary to adopt some such idioms in order to be able to distinguish the contributions made to our observation of common objects by our sensations from those made to it by tuition, inference, memory, conjecture, habit, imagination and association.

According to the theory, then, having a visual sensation can be described as getting a momentary look, or visual appearance, of something, and having an olfactory sensation as getting a momentary whiff of something. But what is it to get a momentary look, or a momentary whiff? And what sort of an object is the look, or the whiff, which is got? First of all, the look of a horse-

race is not a sporting event on a racecourse. In the way in which everyone can witness the horse-race, it is not possible for everyone to witness a momentary look that I get of that race. You cannot get the look that I get, any more than you can suffer the tweak that I suffer. A sense datum, i.e. a momentary look, whiff, tingle or sound, is proprietary to one percipient. Next, the glimpse of a horse-race is described as a momentary patchwork of colour expanses in somebody's field of view. But this has to be qualified by the explanation that it is a patchwork of colour expanses only in a special sense. Ordinarily when people talk of patchworks of colours, they are referring to common objects of anyone's observation such as quilts, tapestries, oil paintings, stage scenery and mildewed plaster, that is, to flattish surfaces of things in front of their noses. But the visual appearances or looks of things which are described as colour patches momentarily occupying particular fields of view are not to be thought of as surfaces of flattish common objects; they are simply expanses of colour, not expanses of coloured canvas or plaster. They occupy their owner's private visual space, though he is, of course, subject to the permanent temptation to re-attach them somehow to the surfaces of common objects in ordinary space.

Finally, though holders of the Sense Datum Theory agree that the looks, smells and tingles that I get are inaccessible to anyone else, they are not agreed that it follows from this that they are mental in status or that they exist 'in my mind.' They seem to owe their genesis to the physical and physiological conditions, but not necessarily also to the psychological conditions, of their recipient.

Having, as they think, shown that there exist such momentary and proprietary objects as looks, whiffs, sounds and the rest, holders of the theory next face the question, "What is it for their recipient to get or have them?" And their answer to this question is simple. In some statements of the theory, he is said to perceive or observe them, in a sense of "perceive" and "observe" which makes it proper to say that he sees colour patches, hears sounds, smells whiffs, tastes flavours and feels tickles. Indeed it is often thought not only allowable, but illuminating, to say that people do not really see horse-races, or taste wines; they really only see colour patches and taste flavours; or else, as a concession to ordinary habits of speech, it is admitted that there is indeed a vulgar sense of "see" and "taste" in which people may say that they see races and taste wines, but that for theoretical purposes we should use these verbs in a different and more refined sense, saying instead that we see colour patches and taste flavours.

Recently, however, the fashion has grown up of using a new set of verbs. Some holders of the theory now prefer to say that we intuit colour patches, we have direct awareness of smells, we have immediate acquaintanceship with noises, we are in direct cognitive relations with tickles, or, generically, we sense sense data. But what is the cash value of these formidable locutions? Their cash value is this. There are some verbs, like "guess," "discover,"

"conclude," "know," "believe" and "wonder," which are used only with such complements as "... that tomorrow is Sunday," or "... whether this is red ink." There are other verbs, like "peep at," "listen to," "observe," "espy" and "come across," the proper complements of which are such expressions as "... that robin," "... the roll of drums" and "... John Doe." The Sense Datum Theory, according to which looks, whiffs and so on are particular objects or events, has therefore to employ cognition verbs of the second sort in order to construe such verbs as "get" and "have" in such expressions as "get a glimpse" or "have a tickle." It has borrowed the ordinary force of verbs like "observe," "scan" and "savour" for its solemnized verbs "intuit," "cognise" and "sense." The difference is that while laymen speak of observing a robin and scanning a page of *The Times*, this theory speaks instead of intuiting colour patches and having immediate acquaintanceship with smells.

It is not claimed that this account of what it is to have, e.g. a visual sensation namely, that it is to intuit or espy a proprietary patchwork of colours, by itself solves the whole problem of our knowledge of common objects. Disputes continue about the linkages obtaining between horse-races, which we do not "strictly" or "directly" see, and the looks of them, which we do "strictly" or "directly" see, but which are not on racecourses. But the holders of the theory hope that their elucidation of what sensing is will lead to the elucidation of what watching a horse-race is.

In particular it is claimed that the theory resolves paradoxes in the description of illusions. When the squinter reports that he sees two candles, where there is only one, and the dipsomaniac says that he sees a snake, where no snake is, their reports can now be reconstrued in the new idiom. The squinter can now be said really to be seeing two "candle-looks," and the dipsomaniac really does see one "snake-appearance." Their only error, if any, lies in their supposing that there also exist two physical candles, or one physical snake. Again, when a person, confronted by a round plate tilted away from him, says that he sees an elliptical object, he is in error if he supposes that the kitchen contains an elliptical piece of crockery, but he is quite correct in saying that he finds something elliptical; for there really is an elliptical patch of white in his field of view, and he really does descry or "intuit" it there. To argue from what he finds in his field of view to what exists in the kitchen is always hazardous, and in this instance it is wrong. But what he finds in his field of view really is there and really is elliptical.

I shall try to prove that this whole theory rests upon a logical howler, the howler, namely, of assimilating the concept of sensation to the concept of observation; and I shall try to show this assimilation makes nonsense simultaneously of the concept of sensation and of the concept of observation. The theory says that when a person has a visual sensation, on the occasion, for example, of getting a glimpse of a horse-race, his having this sensation consists in his finding or intuiting a *sensum*, namely a patchwork of colours.

This means that if having a glimpse of a horse-race entails having at least one sensation, then having a glimpse of colour patches must again involve having at least one appropriate sensation, which in its turn must be analyzed into the sensing of yet an earlier sensum, and so on for ever. At each move having a sensation is construed as a sort of espying of a particular something, often gravely called "a sensible object," and at each move this espying must involve the having of a sensation. The use of awe-inspiring words like "intuit" in no way exempts us from having to say that for a person to find, watch, listen to, peep at or savour something he must be sensitively affected; and to be sensitively affected is to have at least one sensation. So whether, as we ordinarily think, we see horse-races or whether, as we are instructed to think, we intuit colour patches, the descrying of whatever we descry involves our having sensations. And having sensations is not by itself descrying, any more than bricks are houses, or letters are words.

As has been shown earlier, there is an important logical connection between the concept of sensation and that of observing or perceiving, a connection which by itself entails that they are concepts of different kinds. There is a contradiction in saying that someone is watching or peeping at something, but not getting even one glimpse of it; or in saying that someone is listening to something, though he gets no auditory sensations. Having at least one sensation is part of the force of "perceiving," "overhearing," "savouring" and the rest. It follows that having a sensation cannot itself be a species of perceiving, finding or espying. If all clothes are concatenations of stitches, absurdity results from saying that all stitches are themselves very tiny clothes.

It has already been remarked earlier in this chapter that there are several salient differences between the concepts of sensations and those of observation, scrutinizing, detecting and the rest, which are revealed by the uninterchangeability of the epithets by which the different things are described. Thus we can speak of the motives from which a person listens to something, but not of the motives from which he has an auditory sensation; he may show skill, patience and method in peering, but not in having visual sensations. Conversely tickles and tastes may be relatively acute, but his inspections and detections cannot be so described. It makes sense to speak of someone refraining from watching a race or of his suspending his observation of a reptile, but it makes no sense to speak of someone refraining from feeling a pain, or suspending the tingle in his nose. Yet if having a tingle were, as the theory holds, intuiting a special object, it is not clear why this or any discomfort should not be dismissed by suspending the intuition of it.

Sensations then, are not perceivings, observings or findings; they are not detectings, scannings or inspectings; they are not apprehendings, cognisings, intuitings or knowings. To have a sensation is not to be in a cognitive relation to a sensible object. There are no such objects. Nor is there any such relation. Not only is it false, as was argued earlier, that sensations can be

objects of observation; it is also false that they are themselves observings of objects.

A champion of the Sense Datum Theory might admit that, for a person to be describable as listening to a train, he must catch at least one sound and so have at least one auditory sensation, and still deny that, by admitting this point, he necessarily set his foot on the suggested Gadarene slope; he need not concede that, for a person to be describable as hearing a sound, he must have yet a prior sensation in his sensing of that sense datum. "Having a sensation" is merely the vulgar way of reporting the simple intuiting of a special sensible object and to say that a person intuits such an object does not entail his being in any way sensitively affected. He might be an angelic and impassive contemplator of sounds and colour patches, and these might be of any degree of intensity, without anything in him being describable as more or less acute. He may come across tickles without himself being tickled, and the ways in which he becomes acquainted with smells or pains need not involve his being sensitive in any way other than that he is capable of simple detection or inspection of such things.

Such a defence in effect explains the having of sensations as the *not* having any sensations. It avoids the imputed regress by the heroic device of suggesting that sensing is a cognitive process which does not require its owner to be susceptible of stimuli, or to be describable as either highly or slightly sensitive. By construing sensation as the simple observation of special objects, it first does away with the very concept it was professing to elucidate and, in the second stage, makes nonsense of the concept of observation itself, since this concept entails the concept of sensations which are not themselves observings.

Alternatively, the Sense Datum Theory may be defended on a different ground. It may be said that, whatever may be the logical rules governing the concepts of sensation and of observation, it remains an unchallengeable fact that in seeing I am directly presented with patchworks of colours momentarily occupying my field of view, in hearing I am directly presented with noises, in smelling with smells and so forth. That sense data are sensed is beyond question and independent of theory. Two-dimensional colour patches are what I see in the strictest sense of "see"; and these are not horses and jockeys, but at best the looks, or visual appearances, of horses and jockeys. If there are not two candles, then the squinter does not really see two candles, but he certainly sees two bright somethings, and these can be nothing but two proprietary "candlelooks" or sense data. The Sense Datum Theory is not inventing factitious entities, it is merely drawing our attention to the immediate objects of sense which, from our ordinary preoccupation with common objects, we are in the habit of cold-shouldering out of conversation. If logical considerations seem to require that having a sensation shall not be on all fours with desecrating hawks, or gazing at horse-races, so much the worse for those considerations, since having a visual sensation certainly is a non-inferential discerning of a particular sensible object.

Let us consider, then, the hackneyed instance of a person looking at a round plate tilted away from him, which he may therefore describe as looking elliptical; and let us see what, if anything, requires us to say that he is describing a something which really is elliptical. It is agreed that the plate is not elliptical but round, and for the argument's sake we may concede that the spectator is veraciously reporting that it looks elliptical (though round plates, however steeply tilted, do not usually look elliptical). The question is whether the truth of his report that the plate looks elliptical implies that he is really espying, or scanning, an object of sense which is elliptical, something which, not being the plate itself, can claim to be entitled "a look" or "a visual appearance of the plate." We may also grant that if we are bound to say that he has come across an object of sense which is really elliptical and is a visual appearance of the plate, then this elliptical object is a two-dimensional colour patch, momentary in existence and proprietary to one percipient, i.e. that it is a sense datum and therefore that there are sense data.

Now a person without a theory feels no qualms in saying that the round plate might look elliptical. Nor would he feel any qualms in saying that the round plate looks as if it were elliptical. But he would feel qualms in following the recommendation to say that he is seeing an elliptical look of a round plate. Though he talks easily enough in some contexts of the looks of things, and easily enough in other contexts of seeing things, he does not ordinarily talk of seeing or of scanning the looks of things, of gazing at views of races, of catching glimpses of hawks, or of describing the visual appearances of tree-tops. He would feel that, if he mixed his ingredients in these fashions, he would be talking the same sort of nonsense as he would if he moved from talking of eating biscuits and talking of taking nibbles of biscuits to talking of eating nibbles of biscuits. And he would be quite right. He cannot significantly speak of "eating nibbles," since "nibble" is already a noun of eating, and he cannot talk of "seeing looks," since "look" is already a noun of seeing.

When he says that the tilted plate has an elliptical look, or looks as if it were elliptical, he means that it looks as an elliptical but untilted plate would look. Tilted round things sometimes do look quite or exactly like untilted elliptical things; straight sticks half immersed in water occasionally do look rather like unimmersed bent sticks; solid but distant mountains sometimes do look rather like flat mural decorations quite near to one's nose. In saying that the plate looks elliptical, he is not characterizing an extra object, namely "a look," as being elliptical, he is likening how the tilted round plate does look to how untilted elliptical plates do or would look. He is not saying "I am seeing a flat elliptical patch of White," but "I might be seeing an elliptical and untilted piece of white china." We may say that the nearer aeroplane looks faster than the distant aeroplane, but we could not say that it has a "faster look." "Looks faster" means "looks as if it is flying faster through the air."

Talking about the apparent speeds of aeroplanes is not talking about the speeds of appearances of aeroplanes.

In other words, the grammatically unsophisticated sentence "the plate has an elliptical look" does not, as the theory assumes, express one of those basic relational truths which are so much venerated in theory and so seldom used in daily life. It expresses a fairly complex proposition of which one part is both general and hypothetical. It is applying to the actual look of the plate a rule or a recipe about the typical looks of untilted elliptical plates, no matter whether there exist such pieces of china or not. It is what I have elsewhere called a mongrel-categorical statement. It is analogous to saying of someone that he is behaving judicially, or talking like a pedagogue. The squinter, aware of his squint, who reports that it looks just as if there were two candles on the table, or that he might be seeing two candles, is describing how the single candle looks by referring to how pairs of candles regularly look to spectators who are not squinting; and if, not being aware of his squint, he says that there are two candles on the table, he is, in this case, misapplying just the same general recipe. The expressions "it looks . . .," "it looks as if . . .," "it has the appearance of . . .," "I might be seeing . . ." and plenty of others of the same family contain the force of a certain sort of open hypothetical prescription applied to a case in hand. When we say that someone has a pedantic appearance, we do not mean to suggest that there are two kinds of pedantic beings, namely some men and some appearances of men. We mean that he looks rather like some pedantic people look. Similarly there are not two kinds of elliptical objects, namely some platters and some looks; there are only some platters which are elliptical and others which look as if they were elliptical.

In ordinary life there are certain ways in which we are quite ready to speak of patches and splashes of colour. A housewife might say that her sitting-room needed a splash of crimson, without specifying crimson paper, crimson flowers, crimson rugs, or crimson curtains. She might ask her husband to go out and buy "an expanse of crimson . . .," leaving it to him to fill in the lacuna with "geraniums," "distemper," "cretonne," or whatever else would meet her requirements. In a similar way an observer peering through a gap in a hedge might say that he saw an area of yellow . . ., but be unable to specify whether what he had seen were yellow daffodils, yellow charlock, yellow canvas or any other specific kind of common object or material. To complete his sentence he could say only "I saw something yellow."

In contrast with this ordinary use of lacuna-expressions like "a patch of yellow . . ." and "a splash of crimson something or other," the Sense Datum Theory recommends another idiom in which we are to say "I see a patch of White" (and not "I see a patch of white . . .") or "he espied a two-dimensional, elliptical expanse of Blue" (and not a "flat-looking, elliptical-looking blue something or other").

Now I am denying that having a visual sensation is a sort of observation describable as the sensing or intuiting of colour patches. But I am not denying that a woman can properly ask her husband to buy a splash of crimson . . . , or that a pedestrian can properly be said to espy an expanse of yellow something or other through a hole in the hedge. What the Sense Datum Theory has done is to try to skim an ethereal cream off such ordinary lacuna-descriptions of common objects; to talk as if it had found a new class of objects, where it has only misconstrued a familiar range of statements mentioning how otherwise unparticularised common objects are found to look.

Talking about looks, sounds and smells, about expanses, shapes and colours, just as much as talking about perspectives, hazes, focuses and twilights, is already talking about common objects, since it is applying learned perception recipes for the typical appearances of common objects to whatever one is trying to make out at the moment. To say that someone caught a glimpse, or heard a sound, is already to say more than would be involved in barely describing his visual and auditory sensations, for it is already to range what he is attending to under fairly general perception recipes.

This point may be illustrated by reference to the historic doctrine of Secondary Qualities. It was half-correctly observed that when a common object is described as green, bitter, chilly, pungent or shrill, it is being characterised as looking, tasting, feeling, smelling or sounding so and so to a sentient observer; it was correctly noticed, too, that conditions which affect his sensitivity make a difference in how the things look, taste, feel, smell or sound to him. How loud a train sounds depends in part upon the distance of the observer from the train, upon his degree of hardness of hearing, upon the direction in which his head is turned, upon whether his ears are covered and so forth. Whether water of a certain thermometer-temperature feels chilly or cosy depends on the prior thermometer-temperature of his hands. From such facts the theoretical jump was made to the doctrine that to say that an object is green is to say something about the visual sensations of the particular observer who reports that it is green. It was supposed that "green," "bitter," "chilly" and the rest are adjectives which properly apply to sensations and are only improperly applied to common objects. And then, as it is obviously absurd to say that a sensation is a green thing, or an elliptical thing, or a chilly thing, it seemed necessary to allot to sensations their own peculiar objects, so that "green" might be suitably applied not to the having of a sensation. The ban on characterising common objects of anyone's observation by Secondary Quality adjectives led to the invention of some counterpart, privy objects to carry those adjectives. Because Secondary Quality adjectives would not behave except as predicates in observation reports, sensations had to be construed as being themselves observations of special objects.

But when I describe a common object as green or bitter, I am not reporting a fact about my present sensation, though I am saying something

about how it looks or tastes. I am saying that it would look or taste so and so to anyone who was in a condition and position to see or taste properly. Hence I do not contradict myself if I say that the field is green, though at the moment it looks greyish-blue to me; or that the fruit is really bitter, though it appears to me quite tasteless. And even when I say that the grass, though really green, looks greyish-blue to me, I am still describing my momentary sensation only by assimilating it to how common objects that are really greyish-blue normally look to anyone who can see properly. Secondary Quality adjectives are used and are used only for the reporting of publicly ascertainable facts about common objects; for it is a publicly ascertainable fact about a field that it is green, i.e. that it would look so and so to anyone in a position to see it properly. What else could the people who teach other people to talk, teach them about the use of these adjectives? It must be noticed that the formula "it would look so and so to anyone" cannot be paraphrased by "it would look *green* to anyone," for to say that something looks green is to say that it looks as it would if it were green and conditions were normal. We cannot *say* how something looks, or would look, except by mentioning the ascertainable properties of common objects, and then saying that this looks now as that can be expected to look.

So while it is true that to say "the field is green" entails propositions about observers with certain optical equipments or opportunities, it is not true that it tells an anecdote about its author. It is analogous to the proposition "this bicycle costs \$12," which entails hypothetical propositions about any actual or possible purchaser, but does not state or entail any categorical proposition about its author. That an article has a price is a fact about the article and about customers, but it is not a fact about an article and about a given customer; still less is it a fact merely about a given customer.

A person who says "the searchlight is dazzling" need not himself have any dazzle-discomforts; but still he is talking about dazzle-discomforts in another way, though it is a way which involves also talking about the searchlight. It is fallacious to argue that a searchlight cannot be said to be dazzling, unless the speaker is being dazzled, and that therefore dazzlingness is not a quality of the searchlight, but is a quality of that individual's sense data. To say that the searchlight is dazzling does not imply it is now dazzling someone; it says only that it would dazzle anyone of normal eyesight who was looking at it from a certain distance without any protection. My statement "the searchlight is dazzling" no more reports a sensation that I am having than "the bicycle costs \$12" reports money that I am handling. In the sense of "subjective" usually intended, Secondary Qualities are not subjective, though it remains true that in the country of the blind adjectives of colour would have no use, while adjectives of shape, size, distance, direction of motion and so on would have the uses that they have in England.

Arguments for the subjectivity of Secondary Qualities are apt to hinge

in fact upon an interesting verbal trick. Adjectives like "green," "sweet," and "cold" are assimilated to adjectives of discomfort and their opposites, like "dazzling," "palatable," "scalding" and "chilly." Even so, as we have seen, the conclusion drawn does not follow. To call the water "painfully hot" is not to say that the author of the statement or anyone else is in pain. However, it does refer in a more indirect way to people being in pain, and as being in pain is a state of mind, namely one of distress, we can say that "painfully hot" alludes indirectly and *inter alia* to a state of mind. But it certainly does not follow that "the water is lukewarm" and "the sky is blue" allude even in this indirect way to states of mind. "Lukewarm" and "blue" are not adjectives of discomfort or gratification. One road may be described as more boring than a second road and as longer than a third road; but in the way in which the first description does allude to wayfarers feeling bored, the second does not allude to wayfarers' moods at all.

A linguistic consequence of all this argument is that we have no employment for such expressions as "object of sense," "sensible object," "sensus," "sense datum," "sense-content," "sense field" and "sensibilia"; the epistemologist's transitive verb "to sense" and his intimidating "direct awareness" and "acquaintance" can be returned to store. They commemorate nothing more than the attempt to give to concepts of sensation the jobs of concepts of observation, an attempt which inexorably ended in the postulation of sense data as counterparts to the common objects of observation.

It also follows that we need erect no private theatres to provide stages for these postulated extra objects, nor puzzle our heads to describe the indescribable relations between these postulated objects and everyday things.

(4) SENSATION AND OBSERVATION

It is no part of the object of this book to swell the ranks of theories of knowledge in general, or of theories of perception in particular. It is, rather, one of its motives to show that a lot of the theories that go by those names are, or embody, unwanted para-mechanical hypotheses. When theorists pose such "wires and pulleys" questions as, "How are past experiences stored in the mind?" "How does a mind reach out past its screen of sensations to grasp the physical realities outside?" "How do we subsume the data of sense under concepts and categories?" they are apt to pose these problems as if they were problems about the existence and interconnections of hidden bits of ghostly apparatus. They talk as if they were doing something like speculative anatomy or even counter-espionage.

Since, however, we do not regard the fact that a person has a sensation as a fact about his mind, whereas the fact that he observes something and the fact that he tends not to observe things of certain sorts do belong to

the description of his mental operations and powers, it is proper to say more about this difference.

We use the verb "to observe" in two ways. In one use, to say that someone is observing something is to say that he is trying, with or without success, to find out something about it by doing at least some looking, listening, savouring, smelling or feeling. In another use, a person is said to have observed something, when his exploration has been successful, i.e. that he has found something out by some such methods. Verbs of perception such as "see," "hear," "detect," "discriminate" and many others are generally used to record observational successes, while verbs like "watch," "listen," "probe," "scan" and "savour" are used to record observational undertakings, the success of which may be still in question. Hence it is proper to speak of someone watching carefully and successfully, but not of his seeing carefully or successfully, of his probing systematically, but not of his discovering systematically, and so on. The simple-seeming assertion "I see a linnet" claims a success, where "I am trying to make out what is moving" reports only an investigation.

In our present inquiry it will sometimes be convenient to use the ambiguous word "observe" just because it can be used as well to signify discovery as to signify search. The words "perception" and "perceive" which are often used as cardinal in these inquiries, are too narrow since they cover only achievements, as do the specific verbs of perception "see," "hear," "taste," "smell," and, in one sense, "feel."

It has already been remarked that observing entails having at least one sensation, though having sensations does not entail observing. We might now ask, "What more is there in observing than having at least one sensation?" But this formulation of the question is misleading, since it suggests that visually observing a robin consists in both having at least one visual sensation and doing or having something else as well, i.e., in two states or processes coupled together, as humming and walking can be coupled together; and this need not be the case. As was argued [above] there is a crucial difference between doing something with heed and doing it, e.g. in absence of mind, but this difference does not consist in heeding being a concomitant act, occurring in another "place." So we should ask, not, "What is an observer doing besides having sensations?" but, "What does the description of an observer embody over and above the description of him as having those sensations?" This point will be important before long.

We should begin by dismissing a model which in one form or another dominates many speculations about perception. The beloved but spurious question, "How can a person get beyond his sensations to apprehension of external realities?" is often posed as if the situation were like this. There is immured in a windowless cell a prisoner, who has lived there in solitary confinement since birth. All that comes to him from the outside world is

flickers of light thrown upon his cell-walls and tappings heard through the stones; yet from these observed flashes and tappings he becomes, or seems to become, apprised of unobserved football matches, flower-gardens, and eclipses of the sun. How then does he learn the ciphers in which his signals are arranged, or even find out that there are such things as ciphers? How can he interpret the messages which he somehow deciphers, given that the vocabularies of those messages are the vocabularies of football and astronomy and not those of flickers and tappings?

This model is of course the familiar picture of the mind as a ghost in a machine, about the general defects of which nothing more need be said. But certain particular defects do need to be noticed. The use of this sort of model involves the explicit or implicit assumption that, much as the prisoner can see flickers and hear tappings, but cannot, unfortunately, see or hear football matches, so we can observe our visual and other sensations, but cannot, unfortunately, observe robins. But this is doubly to abuse the notion of observation. As has been shown, on the one hand, it is nonsense to speak of a person witnessing a sensation, and, on the other, the ordinary use of verbs like "observe," "espy," "peer at" and so on is in just such contexts as "observe a robin," "espy a ladybird" and "peer at a book." Football matches are just the sorts of things of which we do catch glimpses; and sensations are the sorts of things of which it would be absurd to say that anyone caught glimpses. In other words, the prison model suggests that, in finding out about robins and football matches, we have to do something like inferring from sensations, which we do observe, to birds and games, which we never could observe; whereas in fact it is robins and games that we observe, and it is sensations that we never could observe. The question, "How do we jump from descrying or inspecting sensations to becoming apprised of robins and football matches?" is a spurious how-question.

Now there is no unique and central problem of perception. There is a range of partially overlapping questions, most of which will cease to be intriguing, the moment that a few of them have been cleared up. We can illustrate certain of the problems which belong to this range in this way. To describe someone as finding a thimble is to say something about his having visual, tactual or auditory sensations, but it is to say more than that. Similarly to describe someone as trying to make out whether what he sees is a chaffinch or a robin, a stick or a shadow, a fly on the window or a mote in his eye, is to say something about his visual sensations, but it is to say more than that. Finally, to describe someone as "seeing" a snake that is not there, or as "hearing" voices, where all is silent, seems to be saying something about his images, if not about his sensations, but it is to say more than that. What more is being said? Or, what is the specific force of such descriptions in respect of which they differ both from one another and from "neat" descriptions of sensations, supposing that we could produce such descriptions? The questions, that is, are not questions of the para-mechanical

form "How do we see robins?" but questions of the form, "How do we use such descriptions as 'he saw a robin'?"

When we describe someone as having detected a mosquito in the room, what more are we saying than that there was a certain sort of singing in his ears? We begin by answering that he not only had a singing in his ears but also recognised or identified what he heard as the noise of a fairly adjacent mosquito; and we are inclined to go on to say in more generic terms that he was not only having a singing in his ears, but was also thinking certain thoughts; perhaps that he was subsuming the singing under the concept, or that he was coupling an intellectual process with his sensitive state. But in saying this sort of thing, though we have one foot on the right track, we also have one foot on the wrong track. We are beginning to go on the wrong track, when we say that there must have taken place such and such conceptual or discursive processes; since this is in effect, if not in intention, to say that detecting a mosquito could not happen, unless some special but unobserved ghostly wheels had gone round, wheels whose existence and functions only epistemologists are clever enough to diagnose. On the other hand, in saying this sort of thing we are also on the right track. It is certainly true that a man could not detect a mosquito if he did not know what mosquitoes were and what they sounded like; or if, through absent-mindedness, panic or stupidity, he failed to apply this knowledge to the present situation; for this is part of what "detecting" means.

We do not, that is, want tidings or hypotheses about any other things which the listener may have privily done or undergone. Even if there had taken place three, or seventeen, such *entr'actes*, news about them would not explain how detecting a mosquito differs from having a shrill singing in the ears. What we want to know is how the logical behaviour of "he detected a mosquito" differs from that of "there was a singing in his ears," from that of "he tried in vain to make out what was making the noise," and from that of "he mistook it for the noise of the wind in the telephone wires."

Let us consider a slightly different situation in which a person would be described as not merely hearing something, and not merely listening to something, and not merely trying to make out what he was hearing, but as identifying or recognising what he heard, namely the case of a person who recognises a tune. For this situation to obtain, there must be notes played in his hearing, so he must not be deaf, or anaesthetised, or fast asleep. Recognising what he hears entails hearing. It also entails heeding; the absent-minded or distracted man is not following the tune. But more than this, he must have met this tune before; and he must not only have met it, but also have learned it and not forgotten it. If he did not in this sense already know the tune, he could not be said to recognise it on listening to it now.

What then is it for a person to know a tune, that is to have learned and

not forgotten it? It certainly does not entail his being able to tell its name, for it may have no name; and even if he gave it the wrong name, he might still be said to know the tune. Nor does it entail his being able to describe the tune in words, or write it out in musical notation, for few of us could do that, though most of us can recognise tunes. He need not even be able to hum or whistle the tune, though if he can do so, he certainly knows the tune; and if he can hum or whistle plenty of other tunes, but cannot produce this one, even when prompted, we suspect that he does not know this tune. To describe him as knowing the tune is at the least to say that he is capable of recognising it, when he hears it; and he will be said to recognise it, when he hears it, if he does any, some or all of the following things: if, after hearing a bar or two, he expects those bars to follow which do follow; if he does not erroneously expect the previous bars to be repeated; if he detects omissions or errors in the performance; if, after the music has been switched off for a few moments, he expects it to resume about where it does resume; if, when several people are whistling different tunes, he can pick out who is whistling this tune; if he can beat time correctly; if he can accompany it by whistling or humming it in time and tune, and so on indefinitely. And when we speak of him expecting the notes which are due to follow and not expecting notes or bars which are not due to follow, we do not require that he be actually thinking ahead. Given that he is surprised, scornful or amused, if the due notes and bars do not come at their due times, then it is true to say that he was expecting them, even though it is false to say that he went through any processes of anticipating them.

In short, he is now recognising or following the tune, if, knowing how it goes, he is now using that knowledge; and he uses that knowledge not just by hearing the tune, but by hearing it in a special frame of mind, the frame of mind of being ready to hear both what he is now hearing and what he will hear, or would be about to hear, if the pianist continues playing it and is playing it correctly. He knows how it goes and he now hears the notes as the progress of that tune. He hears them according to the recipe of the tune, in the sense that what he hears is what he is listening for. Yet the complexity of this description of him as both hearing the notes, as they come, and listening for, or being ready for, the notes that do, and the notes that should, come does not imply that he is going through a complex of operations. He need not, for example, be coupling with his hearing of the notes any silent or murmured prose-moves, or "subsuming" what he hears "under the concept of the tune." Indeed, if he were told to think the thought of "Lillibullero," without producing, imagining or actually listening to the tune itself, he would say that there was nothing left for him to think; and if he were told that the fact that he could recognise the tune, even though played in various ways in various situations, meant that he had a Concept, or Abstract Idea, of the tune, he would properly object that he could not think what it would be like to be "considering or applying the

Abstract Idea of Lillibullero," unless this meant merely that he could recognise the tune, when he heard it, detect mistakes and omissions in it, hum snatches from it and so on.

This enables us to reconsider what was said earlier, namely, that a person who recognises what he hears is not only having auditory sensations, but is also thinking. It is not true that a person following a familiar tune need be thinking thoughts such that there must be an answer to the question, "What thoughts has he been thinking?" or even "What general concepts has he been applying?" It is not true that he must have been pondering or declaring propositions to himself, or to the company, in English or French, and it is not true that he must have been marshalling any visual or auditory images. What is true is that he must have been in some degree vigilant, and the notes that he heard must have fallen as he expected them to fall, or shocked him by not doing so. He was neither merely listening, as one might listen to an unfamiliar air, nor yet was he necessarily coupling his listening with some other process; he was just listening according to the recipe.

To clarify further the senses in which following a known tune is and is not "thinking" let us consider the case of a person hearing a waltz for the first time. He does not know how this tune goes, but since he knows how some other waltz tunes go, he knows what sorts of rhythms to expect. He is partially but not fully prepared for the succeeding bars, and he can partially but not completely place the notes already heard and now being heard. He is wondering just how the tune goes, and in wondering he is trying to piece out the arrangement of the notes. At no moment is he quite ready for the note that is due next. That is, he is thinking in the special sense of trying to puzzle something out.

But, in contrast with him, the person who already knows the tune follows the tune without any business of puzzling or trying to make out how the tune goes. It is completely obvious to him all the time. There need be no activity, not even a very swift and very easy activity, of trying to resolve uncertainties, for there are no uncertainties. He is not listening in a worrying-out way; he is just listening. Yet he is not merely hearing notes, for he is hearing "Lillibullero." Not only are the notes clearly audible to him (perhaps they are not), but the tune is quite obvious to him; and the obviousness of the tune is not a fact about his auditory sensitiveness, it is a fact about what he has learned and not forgotten and his present application of those lessons.

Finally, though following a familiar tune entails having become familiarised with it, it does not require going through any operations of reminiscence. Memories of past hearings of the tune need not well up, or be called up. The sense of "thinking" in which a person following a familiar tune can be said to be thinking what he is hearing, is not that thoughts of past auditions are occurring to him. He has not forgotten how it goes, but he is not recalling how it formerly went.

Roughly, to know how a tune goes is to have acquired a set of auditory expectation propensities, and to recognise or follow a tune is to be hearing expected notes after expected notes. And this does not entail the occurrence of any other exercises of expectation than listening for what is being heard and what is due to be heard. The description of a person hearing expected notes is indeed different from that of a person hearing unexpected notes and from that of a person who hears notes without any expectations at all (like a person who is hearing but not listening); but this does not mean that there is something extra going on in the first person which is not going on in the second or the third. It means that the hearing is going on in a different way, the description of which difference involves, not a report of extra occurrences, but only the characterisation of his hearing as specially schooled hearing. That a person is following a tune is, if you like, a fact both about his ears and about his mind; but it is not a conjunction of one fact about his ears and another fact about his mind, or a conjoint report of one incident in his sensitive life and another incident in his intellectual life. It is what I have called a "semi-hypothetical," or "mongrel-categorical," statement.

We can now turn to consider some of the kinds of perceptual episodes which are ordinarily taken as the standard models of perceptual recognition. We shall see that they are in many important respects of a piece with the recognition of a tune. I chose to start with the example of someone following a familiar tune, because this is a protracted occupation. We can see a gatepost in a flash, but we cannot hear "Lillibullero" in a flash. There is here, consequently, no temptation to postulate the occurrence of lightning intellectual processes, processes too rapid to be noticed, but intellectual enough to execute all the Herculean labours demanded by epistemologists.

When a person is described as having seen the thimble, part of what is said is that he has had at least one visual sensation, but a good deal more is said as well. Theorists commonly construe this as meaning that a description of a person as having seen the thimble both says that he had at least one visual sensation and says that he did or underwent something else as well; and they ask accordingly, "What else did the finder of the thimble do or undergo, such that he would not have found the thimble if he had not done or undergone these extra things?" Their queries are then answered by stories about some very swift and unnoticed inferences, or some sudden and unrememberable intellectual leaps, or some fetching up of concepts and clapping them upon the heads of the visual data. They assume, that is, that because the proposition "he espied the thimble" has a considerable logical complexity, it therefore reports a considerable complication of processes. And as these processes are not witnessed going on, it is postulated that they must be going on in a place where they cannot be witnessed, namely, in the finder's stream of consciousness.

Our analysis of what we have in mind, when we say that someone

recognises a tune, can be applied to the new case. Certainly a person who espies the thimble is recognising what he sees, and this certainly entails not only that he has a visual sensation, but also that he has already learned and not forgotten what thimbles look like. He has learned enough of the recipe for the looks of thimbles to recognise thimbles, when he sees them in ordinary lights and positions at ordinary distances and from ordinary angles. When he espies the thimble on this occasion, he is applying his lesson; he is actually doing what he had learned to do. Knowing how thimbles look, he is ready to anticipate, though he need not actually anticipate, how it will look, if he approaches it, or moves away from it; and when, without having executed any such anticipations, he does approach it, or move away from it, it looks as he was prepared for it to look. When the actual glimpses of it that he gets are got according to the thimble recipe, they satisfy his acquired expectation-propensities; and this is his espying the thimble.

As with the tune, so with the thimble; if the recognition is impeded by no difficulties, if, that is, the thimble is obvious to the observer from the first glance, then no extra thinking or pondering, no puzzlings or reminiscences need be performed. He need not say anything in English or French, to himself or to the world; he need not marshal memory images or fancy images; he need not wonder, make conjectures, or take precautions; he need not recall past episodes; he need do nothing that would be described as the thinking of thoughts, though, if linguistically equipped, he can be expected to be ready to do some of these things, if there arises any call to do so. The sense in which he is thinking and not merely having a visual sensation, is that he is having a visual sensation in a thimble-seeing frame of mind. Just as a person who recognises a tune from the first few bars is prepared both retrospectively for those already heard and those now being heard and prospectively for the bars that are to follow, though he goes through no additional operations of preparing for them, so a person who recognises a cow at sight is prepared for a multifarious variety of sights, sounds and smells, of none of which need the thought actually occur to him.

The difficulty will probably be felt that even if this sort of account of the visual obviousness of thimbles and the auditory obviousness of tunes is true, the real question remains unanswered. How do we learn that there are thimbles in the first place? How can a person who starts with mere sensations reach the stage of finding out that there are physical objects? But this is a queer sort of how-question, since, construing it in one way, we all know the answer perfectly well. We know how infants come to learn that some noises do, and others do not, belong to tunes; that some tuneless sequences of noises, like nursery rhymes, have recognisable rhythms; others, like clock-noises, have recognisable monotonies; while yet others, like rattle noises, are random and disorderly. We know too, the sorts of games and exercises by which mothers and nurses teach their infants lessons of these sorts. There is no more

of an epistemological puzzle involved in describing how infants learn perception recipes than there is in describing how boys learn to bicycle. They learn by practice, and we can specify the sorts of practice that expedite this learning.

Now clearly stories about learning by practice will not be felt to give the solution of the how-question asked above. This question was not intended as a question about the stages through which capacities and interests develop, or about the aids and impediments to their development. What then was intended? Perhaps its poser might say something like this. "There is, perhaps, no philosophical puzzle about how children learn tunes, or recognise them, when they have once learned them. Nor perhaps is there a puzzle about analogous learning of recipes in respect of sights, tastes and smells. But there is a big difference between learning a tune and finding out that there are such things as violins, thimbles, cows and gateposts. Finding out that there are material objects requires, as learning tunes does not, getting beyond noises, sights, tastes and smells to public existents other than, and independent of, our personal sensations. And by the metaphorical expression 'getting beyond' is meant getting to know that such objects exist on the basis of originally knowing only that these sensations exist. Our puzzle is, therefore, in accordance with what principles, and from what premises, can a person validly conclude that cows and gateposts exist? Or, if by some lucky instinct he correctly believes such things without inferences, by what inferences can he justify these instinctive beliefs?" That is, the how-question is to be construed as a Sherlock Holmes question of the type 'what evidence had the detective ascertained which enabled him to confirm his suspicion that the gamekeeper was the murderer?' And construing the question in this way, we can swiftly see that it is an improper question. When we speak of the evidence ascertained by the detective, we are thinking of things which he or his informants had observed or witnessed, such as fingerprints found on glasses and conversations overheard by eavesdroppers. But a sensation is not something which its owner observes or witnesses. It is not a clue. Listening to a conversation entails having auditory sensations, for listening is heedful hearing, and hearing entails getting auditory sensations. But having sensations is not discovering clues. We discover clues by listening to conversations and looking at fingerprints. If we could not observe some things, we should not have clues for other things, and conversations are just the sorts of things to which we do listen, as fingerprints and gateposts are just the sorts of things at which we do look.

This improper how-question is tempting, partly because there is a tendency mistakenly to suppose that all learning is discovery by inference from previously ascertained evidence; and then a process of sensing sense data is cast for the role of ascertaining the initial evidence. In fact, of course, we learn how to make inferences from previously ascertained facts just as we learn how to play chess, ride bicycles, or recognise gateposts, namely by

practice, reinforced, maybe, by some schooling. The application of rules of inference is not a condition of learning by practice; it is just one of the countless things learned by practice.

As has been shown, listening and looking are not merely having sensations; nor, however, are they joint processes of observing sensations and inferring to common objects. A person listening or looking is doing something which he would not do, if he were deaf or blind; or, what is quite different, if he were absent-minded, distracted or quite uninterested; or, what is quite different again, if he had not learned to use his ears and eyes. Observing is using one's ears and eyes. But using one's ears and eyes does not entail using, in a different sense, one's visual and auditory sensations as clues. It makes no sense to speak of "using" sensations. It will not even do to say that in watching a cow, I am finding out about the cow "by means of" visual sensations, since this too would suggest that sensations are tools, objects which can be handled in the same sorts of ways as the things seen and heard can be handled. And this would be even more misleading than it would be to say that manipulating a hammer involves first manipulating my fingers, or that I control the hammer by dint of controlling my fingers.

There is another favourite model for the description of sensations. As flour, sugar, milk, eggs and currants are among the raw materials out of which the confectioner concocts cakes, or as bricks and timber are among the raw materials of the builder, so sensations are often spoken of as the raw materials out of which we construct the world we know. As a counterblast to even more misleading stories this story had some important merits. But the notions of collecting, storing, sorting, unpacking, treating, assembling and arranging, which apply to the ingredients of cakes and the materials of houses, do not apply to sensations. We can ask what a cake is made of, but not what knowledge is made of; we can ask what those ingredients are to be made into, but not what is going to be concocted or constructed out of the visual and auditory sensations which the child has recently been having.

We can conclude then, that there is no difference of principle, though there are plenty of differences in detail, between recognising tunes and recognising gateposts. One such difference may be mentioned, before we leave the subject. At a fairly early stage of infancy, the child learns to co-ordinate, for example the sight recipes, the sound recipes and the feel recipes of things like rattles and kittens; and having begun to learn how things of particular sorts can be expected to look, sound and feel, he then begins to learn how they behave; when, for example, the rattle or the kitten makes a noise and when it makes none. He now observes things in an experimental way. But the relatively contemplative business of learning tunes does not, by itself, involve much co-ordination of looks with sounds, or give much room for experimentation. But this is a difference of degree, not one of kind.

One or two residual points should receive brief notice. First, in talking of a person learning a perception recipe, I am not talking of his discovering any causal laws, such as those of physiology, optics or mechanics. The observation of common objects is prior to the discovery of general correlations between special kinds of common objects. Next, in talking of a person knowing a perception recipe, e.g., knowing how common objects are due to look, sound and feel, I am not crediting him with the ability to formulate or impart this recipe. Somewhat as most people know how to tie a few different sorts of knots, but are quite incapable of describing those knots, or following spoken or printed descriptions of them, so we all know how to identify a cow at sight a very long time before we can tell the world anything about the visible marks by which we recognise pictures of cows. Indeed, if we did not learn to recognise things on sight or hearing, before we had learnt to talk about them, we could never start at all. Talking and understanding talk themselves involve recognising words on saying and hearing them.

Though I have drawn most of my instances of seeing according to perception recipes from cases of non-mistaken observation, such as espying a gatepost, the same general account holds for mistaken observations such as "espying" a huntsman, where there is really a pillar box, "discerning" a stick, where there is really a shadow, or "seeing" a snake on the eiderdown, when there is really nothing on the eiderdown. Getting a thing wrong entails what getting it right entails, namely, the use of a technique. A person is not careless, if he has not learned a method, but only if he has learned it and does not apply it properly. Only a person who can balance can lose his balance; only a person who can reason can commit fallacies; only a person who can discriminate huntsmen from pillar boxes can mistake a pillar box for a huntsman; and only a person who knows what snakes look like can fancy he sees a snake without realising that he is only fancying.

(5) PHENOMENALISM

It is of topical interest to say a few words about a theory known as "Phenomenalism." This theory maintains that somewhat as talking about a cricket team is talking in certain ways about the eleven individuals who compose it, so talking about a common object like a gatepost is talking in certain ways about the sense data which observers do or might get in seeing, hearing and feeling it. Just as there is nothing to report in the history of a cricket team, save a certain selection of the actions and experiences of its members, when playing, travelling, dining and conversing as a team, so it is argued, there is nothing more to be said about the gatepost than how it does or would look, sound, feel, etc. Indeed, even to talk about how *it* looks, etc., is misleading; for "it" is simply a succinct way of collecting mentions

of these looks, sounds, etc., which it is proper to team together. It is conceded that this programme cannot in fact be carried out. Whereas we could, at the cost of long-windedness, relate the fortunes of a team by compiling accounts of the team-activities, habits and sentiments of its several members, we could not actually say all we know about the gatepost by describing the pertinent sensations which observers have, or could have. We have no "neat" sensation vocabulary. We can in fact specify our sensations only by mention of common objects, including persons. But it is suggested that this is an accidental defect of language which would be obviated in a language designed to meet the needs of complete logical candour.

One of the commendable motives of this theory was the desire to dispense with occult agencies and principles. Its holders found that current theories of perception postulated unobservable entities or factors to endow things like gateposts with properties which sensations were debarred from revealing. A gatepost is lasting, while sensations are fleeting; it is accessible to anyone, while sensations are proprietary; it observes causal regularities, while sensations are disorderly; it is unitary, while sensations are plural. So there is a tendency to say that behind what is revealed to the senses there lie some ulterior and very important properties of the gatepost, namely that it is an Enduring Substance, a Thing-in-Itself, a Centre of Causation, an Objective Unity, and a variety of other theorists' solemnities. Phenomenalism, accordingly, attempts to dispense with these unavailing theorists' nostrums, though, as I hope to show, it tries to dispense with the nostrums without diagnosing or curing the maladies which they were vainly adduced to remedy.

Phenomenalism also derives from another motive, this time not a commendable motive; and it is a motive from which derived also the theories against which Phenomenalism was a revolt. Namely it supposed that having a sensation is itself a finding of something, or that something is "revealed" in sensation. It assumed the principle of the Sense Datum Theory, that having a sensation is itself a piece of observing, and indeed the only sort of observing which, being proof against mistakes, merited the name "observation." We can only really find out by observation facts about those objects which are directly given in sensations, i.e. such things as colour patches, noises, prickings and whiffs. Only propositions about such objects were observationally verifiable. It seemed to follow that we cannot really observe gateposts and cannot therefore find out by observation the things that we all know quite well about gateposts.

We can now see that both Phenomenalism and the theory that Phenomenalism was opposing were in error from the start. The latter said that since we can observe only sensible objects, gateposts must be partly constituted of elements which cannot be found out by observation. Phenomenalism said that since we can observe only sensible objects, propositions about gateposts must be translatable into propositions about sensible

objects. The truth is that "sensible object" is a nonsensical phrase, so "propositions about sensible objects" is a nonsensical phrase; and so far from it being true that we cannot observe gateposts, "gateposts" is a specimen of the sorts of complements which alone can be significantly given to such expressions as "John Doe is looking at a so and so." Such facts as that gateposts last a very long time, especially if well creosoted, that, unlike wisps of smoke, they are hard and tough, that, unlike shadows, anybody can find them, whether by night or day, that they support the weight of gates, but can be consumed by fire, can be and are found out by observation and experiment. It can also be found out in the same way that gateposts can look very much like trees or men; and that in certain conditions it is very easy to make mistakes about their sizes and distances. Certainly such facts about gateposts are not directly given to sense, or immediately revealed in sensation; but nothing is so given or revealed, since having a sensation is not a finding.

This shows, too, why language does not enable us to formulate the propositions into which, according to Phenomenalism, propositions about gateposts should be translatable. It is not because our vocabularies are incomplete, but because there are no such objects as those for which the extra dictions are desiderated. It is not that we have a vocabulary for common objects and lack a vocabulary for sensible objects, but that the notion of sensible objects is absurd. Not only is it false, then, that ideally we should talk, not in the vocabulary of gateposts, but only in the vocabulary of sensations, but we cannot describe sensations themselves without employing the vocabulary of common objects.

The objection may be made that it is improper to give the honorific title of "observation" to the operations by which we and astronomers ordinarily satisfy ourselves about robins and spiral nebulae. Not only do we often mistake things for other things, but we never have a certificate guaranteeing that we are not making such a mistake. "Observation" ought to be reserved for a mistake-proof process.

But why? If it makes sense to call one man a careful and another a careless observer, why should we then retract and say that neither is genuinely observing, since no degree of cautiousness is ever absolute? We do not say that no one ever reasons, just because no one ever has a certificate guaranteeing that he has not committed a fallacy, so why should it be supposed that there is a kind of mistake-proof operation to which alone the verb "to observe" is consecrated? Indeed "observing," in its task-sense is just one of the verbs to which adverbs like "carefully," "carelessly," "successfully," "unavailingly" are appropriate, which shows that there could not be a sort of observing, in this sense, where there was neither need nor room for precautions against mistakes.

One motive for demanding a guaranteed mistake-proof brand of observation seems to be this. It would be absurd to say that there are, or might be, matters of empirical fact which could not, in principle, be found

out by observation; so, since any ordinary observation actually made might be mistaken, there must be a special sort of mistake-proof observation, in order that "empirical" may be defined in terms of it. And then sensing is invented to play this role, for it is certainly improper to speak of a mistaken sensation. But the reason why sensation cannot be mistaken is not because it is a mistake-proof observing, but because it is not an observing at all. It is as absurd to call a sensation "veridical" as to call it "mistaken." The senses are neither honest nor deceitful. Nor does the argument justify us in postulating any other kind of automatically veridical observation. All it requires is what familiar facts provide, namely that observational mistakes, like any others, are detectable and corrigible; so no empirical fact which has in fact been missed by a lapse, need be missed by an endless series of lapses. What is wanted is not any peculiar certificated process, but the ordinary careful processes; not any incorrigible observations, but ordinary corrigible observations; not inoculation against mistakes, but ordinary precautions against them, ordinary tests for them and ordinary corrections of them. Ascertaining is not a process which bases upon a fund of certainties a superstructure of guesses; it is a process of making sure. Certainties are what we succeed in ascertaining, not things which we pick up by accident or benefaction. They are the wages of work, not the gifts of revelation. When the sabbatical notion of "the Given" has given place to the week-day notion of "the ascertained," we shall have bade farewell to both Phenomenalism and the Sense Datum Theory.

There was another motive for desiderating a mistake-proof brand of observation, namely, that it was half-realised that some observation words, such as "perceive," "see," "detect," "hear" and "observe" (in its "find" sense) are what I have called "achievement verbs." Just as a person cannot win a race unsuccessfully, or solve an anagram incorrectly, since "win" means "race victoriously" and "solve" means "rearrange correctly," so a person cannot detect mistakenly or see incorrectly. To say that he has detected something means that he is not at fault. It is not that the perceiver has used a procedure which prevented him from going wrong or set a Faculty to work which is fettered to infallibility, but that the perception verb employed itself connotes that he did not go wrong. But when we employ the task verbs "scan," "listen," "search" and the rest, it always makes sense to say that the operations denoted by them might go wrong, or be fruitless. There is nothing to prevent a scrutiny from being bungled or unavailing. Simple logic "prevents" curing, finding, solving and hitting the bull's eye from being bungled or unavailing. The fact that doctors cannot cure unsuccessfully does not mean that they are infallible doctors; it only means that there is a contradiction in saying that a treatment which has succeeded has not succeeded.

This is why a person who claims to have seen a linnet, or heard a nightingale, and is then persuaded that there was no linnet or nightingale,

at once withdraws his claim to have seen the linnet, or heard the nightingale. He does not say that he saw a linnet which was not there, or that he heard an unreal nightingale. Similarly, a person who claims to have solved an anagram and is then persuaded that that is not the solution, withdraws his claim to have solved it. He does not say that in a "strict" or "refined" sense of the verb he solved a "solution-object," which happened not to coincide with the word camouflaged in the anagram.

Underlying most, if not all, of the views criticised in this chapter there seems to be one general assumption; the assumption that whatever is known is learned either by inference from premisses, or, in the case of the ultimate premisses, by some sort of non-inferential confrontation. This confrontation has been traditionally labelled "consciousness," "immediate awareness," "acquaintance," "direct inspection," "intuition," etc., words which no one without an epistemological theory to support ever uses for chronicling special episodes in his daily life.

This pet dichotomy "either by inference or by intuition" seems to have its historical origin in the deference of epistemologists to Euclidean geometry. The truths of geometry are either theorems or axioms, and since geometry was, for a time, the exemplar of scientific knowledge, all other procedures for finding out truths, or establishing them, were piously assimilated to this one special procedure.

But the assumption of similarity is false. There are lots of different ways of ascertaining things which are neither blank acquiescent gazings, nor yet inferences. Consider the replies we should expect to get to the following "How-do-you-know?" questions. "How do you know that there are twelve chairs in the room?" "By counting them." "How do you know that 9×17 makes 153?" "By multiplying them and then checking the answer by subtracting 17 from 10×17 ." "How do you know the spelling of 'fuchsia'?" "By consulting the dictionary." "How do you know the dates of the Kings of England?" "By learning them by heart for a strict schoolmaster." "How do you know that the pain is in your leg and not in your shoulder?" "They are my leg and shoulder, aren't they?" "How do you know the fire is out?" "I looked twice and felt with my hand."

In none of these situations should we press to be told the steps of any inferences, or the counterparts of any axioms; nor should we grumble at the adoption of these different techniques of discovery, but only, in cases of doubt, at the carelessness of their execution. Nor do we require that tennis should be played as if it were, at bottom, a variety of Halma.

(6) AFTERTHOUGHTS

As I said in the Foreword, there is something seriously amiss with the discussions occupying this chapter. I have talked as if we know how to

use the concept or concepts of sensation; I have spoken with almost perfunctory regret of our lack of "neat" sensation words; and I have glibly spoken of auditory and visual sensations. But I am sure that none of this will do.

Sometimes we use the word "sensation" in a sophisticated tone of voice to show that we are conversant with modern physiological, neurological and psychological hypotheses. We use it in the same breath with scientific words like "stimulus," "nerve-endings" and "rods and cones"; and when we say that a flash of light causes a visual sensation, we think that experimentalists are now able, or will one day be able, to tell us what sort of a thing such a visual sensation is. But quite different from this is an unsophisticated use of "sensation" and "feeling"; the sense in which I say, without thinking about theories, that the electric shock gave me a tingling feeling up my arm, or that sensation is now returning to my numbed leg. In this use, we are quite ready to say that a piece of grit, or a dazzling light, gives us disagreeable sensations in our eyes; but in this use we should never say that the things we ordinarily look at give us any sensations in our eyes at all. When the grit is removed, we can reply to the question, "How does your eye feel now?" But when we switch our gaze from the field to the sky, we can give no answer to the question, "How has that switch modified the feelings in your eyes?" We can say from our own knowledge how the view has changed; and we can say, on hearsay knowledge of special theories, that presumably there have been a change of stimuli and a change in the reactions of our rods and cones. But there was nothing which we should ordinarily call "a feeling" in our eyes at either stage.

Similarly, a few pungent or acrid smells give us special and describable feelings inside our noses and throats; but most smells give us no such sensations inside our noses. I can distinguish the smell of roses from the smell of bread, but I do not naively describe this difference by saying that roses give me one, and bread another, sort of sensation or feeling, as electric shocks and hot water do give me different sorts of sensations in my hand.

In our ordinary use of them, the words "sensation," "feel" and "feeling" originally signify perceptions. A sensation is a sensation of something and we feel the ship vibrating, or rolling, as we see its flag flying, or hear its siren hooting. We can, in this sense, feel things distinctly or indistinctly, as we can smell them distinctly or indistinctly. As we see with our eyes and hear with our ears, so we feel things with our hands, lips, tongues or knees. To find out whether or not a common object is sticky, warm, lissom, hard or gritty, we have not to look, listen, sniff, or savour, but to feel the thing. Reporting a sensation is, in this ordinary, unsophisticated use, reporting something found out by tactual or kinaesthetic observation.

True, we often use "feel" and "sensation" in a different, though derivative way. When a person with sore eyes says that there is a gritty feeling

under his eyelids, or when a feverish person says that his head feels hot and his feet feel cold, they would not withdraw their statements on being assured that there was no grit under the eyelids, or that the head and feet were of the same temperature. For here their "feel" means "feels as if," just as "looks" often means "looks as if" and "sounds" means "sounds as if." But what is needed to complete the "as if" clause is a reference to some state of affairs, which, if it really obtained, would be found out by feeling in the primary sense of this word—the sense in which "I feel a piece of grit under my eyelid" would be withdrawn, when the speaker was satisfied that there was no grit there. We might call this a "post-perceptual" use of the verbs "feel," "look," "sound" and the rest.

There is, however, an important disparity between "feel" on the one hand and "see," "hear," "taste" and "smell" on the other. A person whose foot is numbed may say not only that he cannot feel things with his foot, but also that he cannot feel his foot, whereas a momentarily blinded or deafened person would say that he could not see or hear things with his right eye or right ear, but not that he could not see his eye or hear his ear. When sensation returns to the numbed foot its owner resumes his ability to report things both about the pavement and about the foot.

It is obvious that this primary concept of sensation is not a component of the generic concept of perception, since it is just a species of that genus. I can see something without feeling anything, just as I can feel something without seeing anything.

What then of the other, sophisticated sense of "sensation," the sense in which it is said that seeing involves having visual sensations or impressions? Sensations or impressions in this sense are not things that people mention, until they have at least a hearsay knowledge of physiological, psychological or epistemological theories. Yet long before they reach this level of edification, they know how to use verbs of perception, like "see," "hear," "taste," "smell" and "feel," and they use them then just as they continue to use them after edification. So the sophisticated concept of sensations or impressions is not a component of their concepts of perception. We could, and should, do well to discuss with Plato the notion of perception; if we did so, we should never have occasion to complain that he had not yet graduated to the use of the concepts of seeing, hearing and feeling, since he had not yet been told latter-day theories about sensory stimuli.

Physiologists and psychologists sometimes lament, or boast, that they cannot find a bridge across the gulf separating impressions and the nervous excitations which cause them. They take for granted the existence of these impressions; it is only the mechanism of their causation which, not unnaturally, perplexes them. How could one question the existence of sense impressions? Has it not been notorious, at least since the time of Descartes, that these are the original, the elementary and the constant contents of consciousness?

Now when we say that a person is conscious of something, part of what we normally mean is that he is ready to avow or report it without research or special tuition. Yet just this is what no one ever does with his alleged impressions. People are ordinarily ready to tell what they see, hear, taste, smell or feel; they are ready, too, to tell that it looks as if so and so, or that it sounds or feels as if such and such. But they are not ready, indeed they are not even linguistically equipped, to tell what impressions they are or have been having. So the notion that such episodes occur does not derive from study of what ordinary sensible people are found telling. They are not mentioned in the deliverances of untutored "consciousness." Rather, the notion derives from a special causal hypothesis—the hypothesis that my mind can get in touch with a gatepost, only if the gatepost causes something to go on in my body, which in its turn causes something else to go on in my mind. Impressions are ghostly impulses, postulated for the ends of a para-mechanical theory. The very word "impression," borrowed as it was from the description of dents made in wax, betrays the motives of the theory. It is a philosophical misfortune that the theory was able to trade on, and pervert, the vocabulary in which we tell the things that we find out by feeling. It is not a specialists' theory, but a piece of common knowledge, that we find out by sensation that things are warm, sticky, vibrating and tough. It was, accordingly, made to seem just a more general piece of common knowledge that we have sensations when we see, hear and smell. The sophisticated notion of sense impressions has been smuggled in under the umbrella of the ordinary idea of perception by touch.

I must not omit to mention another unsophisticated use of words like "sensation" and "feel." Sometimes a person will say, not that he feels a piece of grit under his eyelid, and not that he feels a gritty feeling under his eyelids, but that he feels a pain in his eye, or has a painful sensation in his eye. Nouns of discomfort, like "pain," "itch," and "qualm" come then to be treated by some theorists as names of specific sensations, where "sensation" is used in its sophisticated sense as a synonym of the other sophisticated word "impression." But if a sufferer is asked just what he feels, he does not satisfy the questioner by replying "a pain" or "a discomfort," but only by replying "a stabbing feeling," "a gritty feeling," or "a burning feeling." He has to use a post-perceptual expression to the effect that it feels as if something sharp were stabbing him, something gritty were scratching him, or something red-hot were scorching him. That he is in slight, great or intense distress is information of a different sort, given in answer to a different sort of question. So the suggestion is mistaken that in nouns like "pain," "itch" and "qualm" we do, after all, possess the beginnings of a vocabulary in which to report or describe impressions. There remains, however, an interesting and perhaps important difference between the sense in which a piece of grit hurts me and the sense in which a heard discord, or a seen clash of colours, hurts me. The grit literally

hurts my eye, where the discord only metaphorically hurts my ears. I should not ask the chemist for an optical anodyne to stop the distress given to me by a clash of colours, and if asked whether the clash hurt my right eye more than it hurt my left eye, I should refuse to answer, unless by saying that it did not literally hurt my eyes at all, as grit and dazzling lights do literally hurt my eyes.

Words like "distress," "distaste," "grief" and "annoyance" are names of moods. But "hurt," "itch," and "qualm," when used literally, are not the names of moods. We locate hurts and itches where we locate the grit, or the straw, that we feel, or fancy we feel. Yet "hurt" and "itch" are not nouns of perception either. Hurts and itches cannot, for instance, be distinct or indistinct, clear or unclear. Whereas, finding something out by sight or touch is an achievement, "I itch terribly" does not report an achievement, or describe anything ascertained. I do not know what more is to be said about the logical grammar of such words, save that there is much more to be said.

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EDMUND HUSSERL

1859–1938

Husserl, the founder of modern phenomenology, was trained in mathematics in Germany. In 1884, he went to Vienna to continue his mathematical studies; there he became a pupil of Franz Brentano¹ and discovered that his real bent was for philosophy. In 1887, Husserl became a Privatdozent at Halle. He was appointed professor at Göttingen in 1901. He moved to Freiburg in Breisgau in 1916 where he remained until his retirement in 1928. He influenced Max Scheler and Martin Heidegger, who was his pupil and, on Husserl's recommendation, his successor at Freiburg. Husserl also had an influence on Sartre and Merleau-Ponty, two of the most prominent French existentialists of our time. Finally, Husserl's phenomenological method gave direction to the work of two well-known Continental psychologists, Binswanger and Buytendijk.²

To the student reared in the English-speaking tradition in philosophy, Husserl's phenomenology may seem bizarre. But the same student will have no trouble seeing that Husserl is squarely in the mainstream of recent philosophy in one important respect. A dominant and recurring motif in recent philosophical thought is the conviction that philosophy is not a factual science, it cannot ground itself in the findings of the factual sciences, and it cannot use the methods of investigation characteristic of the factual sciences. This much binds together thinkers as different from

one another in other respects as the logical positivists and Moore, Russell and Sartre, Wittgenstein and Husserl, Heidegger and Bergson. The differences are in the ways in which the philosophic enterprise is conceived. The main break is between English-speaking and Continental philosophy. The style in which contemporary English-speaking philosophers do their work is influenced largely by Russell, Moore, and Wittgenstein—particularly the Wittgenstein of the *Philosophical Investigations*. We have already seen that philosophy as practiced by these philosophers and their sympathizers is conceptual analysis, and conceptual analysis is largely carried on by an examination of the meaning and use of certain linguistic expressions. On the Continent, on the other hand, a dominant style of philosophizing, specifically that of the French and German existentialists, is influenced largely by the existential phenomenology of Martin Heidegger, whose phenomenological method, in turn, was developed as a result of his apprenticeship under Husserl. Apart from the intrinsic philosophical significance of his contribution, Husserl is a key figure in understanding the development of contemporary existentialism. Although, as we shall see, Heidegger does make conceptual points, his interest in language is in the main very different from that of the practitioners of conceptual or logical analysis. Heidegger indulges in a good deal of etymological speculation about the ways in which the pre-Socratics used certain terms, the implication being that the rediscovery of the original intent of the first philosophers of the West is the essential step toward philosophical wisdom. There is none of this in the work of the analysts. Nor is it the main or only activity that Heidegger himself identifies with philosophizing. In *Sein und Zeit*, his major work (parts of which are included in this book), Heidegger invents his own terminology in German in an attempt to delineate the essence of human existence (*Dasein*) as the approach to an understanding of Being, in which, says Heidegger, we are immersed up to our ears, and without understanding this we will understand nothing that matters, such as the nature of human existence in time, in relation to other human beings, to inanimate things, death, conscience, potentiality and actuality, freedom and possibility.

There is such a vast difference in approach between the analytic philosophers and those who belong in the contemporary Continental tradition that it is virtually impossible for people in the two camps to communicate with each other, let alone to take one another seriously. But Heidegger and the Heideggerians would emphatically agree with the analysts that whatever philosophy is, it is not one of the empirical sciences nor does it presuppose any of their methods or conclusions. It is a safe generalization, then, that recent and contemporary Western philosophy is characteristically opposed to regarding philosophy as an empirical science. And Husserl is one of the leading standard-bearers of this opposition. In Husserl's case, the motif finds expression in his attack on psychologism and in his conception of philosophy as phenomenology.

Husserl's phenomenology is an outgrowth of his attack on psychologism. Psychologism is a species of the view that philosophy is reducible to a factual science, in this case to psychology. Husserl is just as strongly against "biologism" and "anthropologism" as he is against psychologism. His critique of psychologism first appeared in 1901, in the prolegomena to the six essays in the

Logische Untersuchungen. Prior to this, in 1891, in *The Philosophy of Arithmetic* Husserl himself had endorsed psychologism. So that in 1901, Husserl is also criticizing himself as he had been in 1891, much as Wittgenstein in the *Investigations* criticizes the earlier ideas of the *Tractatus*.

To put it more exactly, psychologism is the attempt to reduce the fundamental laws or rules of logic and mathematics to psychological generalizations about the ways in which people actually think. Take the statement:

(1) If all men are mortal and Socrates is a man, then Socrates is mortal.

A psychologicistic rendering of (1) is:

(2) As a matter of fact, anyone who believes that all men are mortal and that Socrates is a man will inevitably believe that Socrates is mortal.

This is likening (1) to a scientific generalization such as one of the laws of motion. The trouble with this interpretation is that it simply does not account for the difference in the sort of certainty between (1) and (2). No one can be sure that (2) is true, unless he has made many observations, and even at that he will have only a certain degree of probability, a practical certainty, but not the absolute certainty that (1) seems to inspire. Of course, if the only difference was this difference in "feel," we could not prove anything either way. But there are explanations of why (1) inspires the certainty that it does. Husserl's explanation, one which few philosophers in the English-speaking tradition would accept as either complete or illuminating, is that *pure rational intuition* reveals that the complex *all men being mortal and Socrates being a man* comprehends the fact that Socrates is mortal. To get at this logical "fact," says Husserl, we need no empirical observation such as we need if we are ever to know whether (2) is true. Suppose we did find a man who said that he believed the complex but not what the complex is said to comprehend. Husserl would say of such a man that he was simply unreasonable. Husserl would not allow that the possibility of finding such a man would in any way refute (1). A psychologicistic philosopher might next try to interpret (1) as:

(3) Anyone who believes that all men are mortal and Socrates is a man will inevitably believe that Socrates is mortal, provided that he reasons in accordance with the laws of thought.

Against this Husserl says that the notion of laws of thought is ambiguous. It can mean the matter-of-fact regularities exhibited by human thinking or it can mean the standards that determine whether a man is thinking as he ought to think. In the former sense of "laws of thought," (3) is an empirical (psychological) generalization, and it is not equivalent to (1) for the same reasons that (2) is not equivalent to (1). In the latter sense of "laws of thought," (3) is not equivalent to (2), but then (3) is not a psychological statement either.

Husserl also has arguments which, he thinks, will dispose of psychologism wholesale. He argues that any theory that reduces logic to psychology is viciously circular. We cannot derive (deduce, infer, conclude) anything from anything unless we employ some rules of inference. In other words, we cannot reason in psychology without presupposing some rule of logic or other; in fact, we cannot reason at all, in any subject matter, unless we use the laws of logic.

Or, to say the same thing in still another way, we cannot *derive* any rule of logic without assuming the rules of logic.

Husserl also criticizes psychologistic theories of evidence (see, for example, Lecture IV of *The Idea of Phenomenology*, pp. 665–667). Here he finds the same sorts of difficulties as occur in psychologism as such. Evidence, according to Husserl, consists neither in the degree of conviction with which we believe, nor in the strength of our feelings, nor in our inclinations to take for granted. The evident is that which discloses itself to pure intuition, and evidence consists of self-givenness.

What Husserl says about the logical relations among statements he also says about the logical relations among concepts. For instance, (4) “All cats are mammals” is an “analytic” statement. It is necessarily true, and its truth is determined by the logical relation obtaining between the concept of being a cat and the concept of being a mammal. According to Husserl, an intuitive grasp of the cat concept reveals that being a mammal is necessarily involved in being a cat. Husserl divides *a priori* judgments into those that are analytic and those that are synthetic. The judgment is *a priori* if the object of the judgment does not have to be given in a perception. In the analytic judgment what is predicated of the object is “contained” in the subject-determination, that is, the predicate does not introduce anything materially new. In the synthetic *a priori* judgment, the predicated determinations are not “contained” in those of the subject; still, they are necessarily connected with them and are known to be so connected. The interested reader may study the original³; for a lengthy exposition in English, see Marvin Farber’s *The Foundation of Phenomenology*.⁴

Thus, both in the case of logical relations among statements and among concepts, we are dealing with “essences,” “universals,” “abstract” entities, these being the sorts of entities that are not to be identified with perceptual objects. They are given to pure intuition, provided that “intuition” is not understood in the Kantian sense. In what sense, then, are we to understand it?

The answer comes in two stages, corresponding to the two stages in the development of Husserl’s phenomenology. At the earlier stage of the *Logische Untersuchungen* intuition is a direct inspection of the essence of this or that type of mental act, for example, seeing, imagining, believing. Phenomenology is at this stage “descriptive psychology,” differing from empirical psychology in that the latter is concerned with causal explanation but not with describing the essence of types of psychological acts, whereas phenomenology is concerned with describing types of psychological acts, but not with causal explanation. There is as yet no machinery of phenomenological and transcendental reduction. In the later stage of phenomenology, heralded by *The Idea of Phenomenology*, these reductions give the concept of “intuition” a new slant. “Intuition” is still to be understood in the Cartesian sense of a direct awareness of what is given, but with important modifications in both method and application.

The Idea of Phenomenology, which we have included in this book, is a series of five lectures delivered in Göttingen in 1907. It marks the transition from Husserl’s earlier phenomenology in the *Investigations* to the later more radically Husserlian phenomenology. In these lectures Husserl introduces for the first time many of the major themes of his later phenomenology. These include:

phenomenological reduction (the *ἐποχή*, the phenomenological "bracketing out"), eidetic abstraction, the pure phenomenon, the different kinds of immanence and transcendence, and the theory about the "constitution" of objects of cognition.

According to Walter Biemel, the editor of the German edition of the five lectures, Husserl underwent a crisis in the year 1906.⁵ He was then having doubts about his own philosophical importance. These doubts were compounded by his failure to be appointed full professor in Göttingen. Biemel intimates that these five lectures were the beginning of a new phase, the characteristically Husserlian phenomenology, a phase initiated by Husserl's determination to take stock of himself as a philosopher. The task he set himself was no less than the critique of theoretical and practical reason. The Kantian statement of the problem suggests that Husserl was preoccupied by the same sorts of problems that plagued Kant. Husserl, however, found more inspiration in Descartes and Brentano than he did in Kant.

From Brentano, his teacher, Husserl had absorbed the intentional theory of mind.⁶ According to it, intentionality characterizes mental acts such as judgments, beliefs, meanings, valuations, desires, loves, hatreds, and so on. An intentional act, said Brentano, is always "about" or "of." I think of or about. I desire this or that. And the peculiarity of intentional acts is that their objects do not *have* to exist. An intentional act may have as its object an existentially mind-dependent entity, for example, the *idea* of a mermaid; or its object may be something physical; or it may be an impossible thing such as the round square; or it may be something possible but unactualized, such as a golden mountain. Any mode of mentality (loving, desiring, believing) may have as its object an "intentionally inexistent" entity, namely, an entity that is neither physical nor existentially mind-dependent. The *idea* of a mermaid is, being an *idea*, existentially mind-dependent. But the *mermaid* which is the intention of the idea is neither a physical thing nor is it existentially mind-dependent. In contrast to this, no physical action requiring an object can be performed upon an intentionally inexistent entity. Kicking a football requires a football; but thinking of a football does not. I may think of a football that never existed. Brentano identified the mental with any intentional state, that is, with any state that *could* be directed to an intentionally inexistent entity.* Some such conception of the mental is presupposed in the *Logische Untersuchungen*.

The essences studied in the early phase of phenomenology are unreduced.

* This, however, is only one possible interpretation of Brentano's view of intentionality as presented in Chapter I of *Psychologie vom empirischen Standpunkt*.⁷ It is also possible to interpret Brentano as saying that on *every* occasion of a mental act, whether there be a physical thing as referent or not, there is an intentionally inexistent entity; so that, for example, when I desire the apple in front of me, the apple is the object of my desire in one sense of "object," namely, as the thing that could satisfy my desire; but there is also another object, the intentionally inexistent apple which is the common and peculiar element in all desires of apples. My colleague, Robert Sleigh, Jr., suggested the following analogy that would be helpful to those familiar with the sense-datum theory. The sense-datum is to the intentionally inexistent object what the perceptual object, if there is one, is to the material referent, if there is one, of the intentional act. There are Brentano scholars who believe that the second interpretation is what Brentano intended. Husserl's work, at least from the *Idea of Phenomenology* on, strongly suggests that his conception of the mental is in line with the second interpretation. See also R. M. Chisholm, *Perceiving*.⁸

In the later phenomenology these unreduced objects give way to phenomenologically and transcendently reduced and eidetically abstracted pure phenomena present to consciousness. They are essences and they are intentionally inessential objects. Descartes's method of doubt, says Husserl, is the exactly right beginning toward locating the objects of philosophical, namely, phenomenological, inquiry. In *The Idea of Phenomenology* Husserl avers that the problem for the critique of knowledge is to locate the absolutely bare, presuppositionless data on which to build the whole of knowledge; more precisely, the problem is to intuit the essence of knowledge, and thereby to "see" how valid cognition is an unquestionable fact. But, says Husserl, Descartes did not use the method of doubt to the end to which it is eminently suited, namely, to locate the pure data required by the critique of knowledge. Even worse, Husserl implies, Descartes misconceived the problem of knowledge. Let me try to explain what I think Husserl has in mind.

The problem of knowledge, as Descartes posed it, simply comes to this. How can I, the critical philosopher, justify my "natural" beliefs about the existence and nature of all sorts of entities, from God to the kitchen sink, entities which, by hypothesis, are not given to me "immediately"? How can I validly move from that which is immanent to that which is transcendent, from that which is a content of a *cogitatio*, of a mental act, to that which lies outside a *cogitatio*? The Cartesian method of doubt, Husserl suggests, requires that we locate pure data, themselves independent of all presuppositions and logically adequate for the critical reconstruction of knowledge.

According to Husserl, however, we shall fail to locate what we need if we equate the immanent with that which is "in me" and the transcendent with that which is "outside of me." Thus, if we say that the content of the Cartesian *cogitatio* is a psychological ingredient in it, a "piece of furniture" located "in me," and the transcendent is a *different* reality existing "outside of me," then we reduce to paradox the theory that the contents of the mind are reliable indexes, veridical representations, of the entirely different (because extramental) transcendencies that our empirical and *a priori* knowledge is supposed to be about. The paradox is that, according to the theory, in order to validate knowledge we must see that the mental content veridically represents the extramental reality. But, as Berkeley asked, how can we ever compare a mental content with something that, by hypothesis, is never itself given? Descartes resorted to God to validate our "natural" beliefs. Apart from the inconclusiveness of the arguments for God's existence and the suspicion of circularity that this part of Descartes's procedure arouses, God can be used for diametrically opposed purposes: witness Berkeley. Whereas Descartes had argued that God's existence and goodness are incompatible with the nonexistence of material substance, Berkeley argued that the contrary is the case. The perceptive reader will see that according to the above, which is my interpretation of some things Husserl says about "epistemology" leading to scepticism and paradox (see *The Idea of Phenomenology*), Descartes himself would be one of the sceptical "epistemologists."

Now in the *Untersuchungen* there is no problem about justifying our "natural" belief in the independent reality of the world. The phenomenology of 1901 is not interested either in the actual existence or in the transcendently

posited characteristics of things. It is interested only in their status as "phenomena" for consciousness. For example, in analyzing seeing as a mental act phenomenology (descriptive psychology) is to concern itself not with the question of the actual existence of the object seen but rather with the question of what an object would *have to be* in order to be an object for seeing. It would have to have color, hence extension, shape, size, and so on. These features would be the essence of being a visible object even if there were no actually existing colored or extended things. Later, in the post-1907 period, Husserl did worry about the problem of the independent reality of bodies and other minds, but not even then did he pose the problem in the manner that Berkeley found objectionable in Descartes.

Beginning with *The Idea of Phenomenology*, the first task of the critique of knowledge is to locate the pure data of phenomenological inquiry. To get at them, Husserl submits, we have first to notice that there are two sorts of immanences with their correlative transcendencies. On the one hand, the immanent-transcendent dichotomy covers the precritical dualism, "in me—outside of me." The crucial sense of immanence, on the other hand, is the sense in which it is intentionally in-existent essences that are immanent. They are the referents of intentional acts. Their immanence consists in their self-giveness (*Selbstgegebenheit*) to pure intuition. At the same time, they are transcendent in that their nature and reality are independent of their being actually in commerce with mind via some mode of mental activity or other, for example, being imagined, desired, believed, and so on. (This, however, is the doctrine in *The Idea of Phenomenology*. Later on, when Husserl became preoccupied with transcendental subjectivity, which I shall mention below, he moved from this Platonic realism to a form of subjective idealism.)

The pure datum, the one to be located by the properly refined Cartesian method of doubt, is the immanent thing, in the "critical" sense of "immanent." To get to it, we need to go through several steps, each of which will be a refinement of Descartes's method of doubt. First, we need phenomenological reduction. This means suspending all beliefs characteristic of the "natural attitude," the attitude of common sense and science; in short, everything that is not "apodictic." Our perception of a chair, for instance, involves the belief that a physical chair is present "out there." This belief is neither necessarily true nor necessarily false. In the phenomenologically reduced state of the given, we are to hold in abeyance every such belief. And the same for mathematical objects. When we want to take a phenomenological look at say the number two, we are not to include in our thought of it that the number two has an objective, extra-mental though not physical, existence. The *ἐποχή*, the exclusion of transcendencies posited by the "natural attitude," is the first step of phenomenological analysis.

The second step is to perform an *eidetic reduction*, whereby in the particular occasion of say the perception of a chair, we bring ourselves to grasp perception as a universal; we make the pure essence of perception give itself to our pure intuition. The universals that become objects of phenomenological investigation cannot be had except through actual experience. A blind man, for instance, could never "get at" the essence of seeing because he cannot see. The phenom-

enologist must be in a position to "take a look" at what is going on when he is actually seeing something. Only then can he describe what seeing is as such as against *this* occasion of his seeing *that* object. What is more, phenomenological description is, as of old, not interested in causal or genetic accounts about the conditions under which the universals "give themselves" to pure intuition.

The third step is to discern the manner in which objects of cognition are *constituted* in cognition. This, says Husserl, requires much more than simply "looking" at the reduced phenomena. It requires a very careful scrutiny of the manner in which, within cognition, objects are compounded or synthesized according to stable regularities that are not psychological laws of association but are rather the forms of cognitive acts. For example, Husserl takes up sound as a phenomenon and suggests that the momentarily perceived tone is distinct from sound as a phenomenon. Sound is perceived as having time-phases, yet the phases are not given at any moment. They are formally constitutive of what sound is essentially (which is to be distinguished from sound as described in physics).

To put it in a simple and summary fashion, the phenomenologist is in search of a "pure" or "reduced" object, the essence of a special thing or of a process, such as seeing. He supposes that the process is unclear and indistinct in its everyday context. In the case of seeing, the "pure" or "reduced" phenomenon would be *seeing* plus a *cogitatio*, an act of attention focused upon seeing, to find out what seeing *is*. In the natural, everyday context, there is simply seeing. Wittgenstein, in his *Philosophical Investigations*,⁹ makes certain devastating observations against the phenomenological program. For instance, *seeing* plus an effort to find out what seeing *is* is different from seeing as it ordinarily occurs. But the reader should read the above-mentioned references for the rewarding details.

In *The Idea of Phenomenology* Husserl hints at a doctrine that was later to become very important in his thought—the centrality of the transcendental ego. In the fourteenth edition of the *Encyclopaedia Britannica* Husserl has an article on Phenomenology. In it he describes transcendental subjectivity as follows:

Psychical subjectivity, the "I" and "we" of everyday intent, may be as it is in itself under the phenomenological-psychological reduction, and being eidetically treated, may establish a phenomenological psychology. But the transcendental subjectivity which for want of language we can only call again, "I myself," "we ourselves," cannot be found under the attitude of psychological or natural science, being no part at all of the objective world, but that subjective conscious life itself, wherein the world and all its content is made for "us," for "me." We that are, indeed, men, spiritual and bodily, existing in the world, are, therefore, "appearances" unto ourselves, parcel of what "we" have constituted, pieces of the significance "we" have made. The "I" and the "we," which apprehend, presuppose the hidden "I" and "we" to whom they are "present."

Transcendental subjectivity, Husserl continues, requires a further reduction, the transcendental reduction. In this we not only hold in abeyance the things and features of things we posit through the "natural attitude" (cf. Santayana's

"animal faith") but also "bracket out" the phenomenal selves, including our own self. The idea is to reduce the whole of reality to transcendently reduced data. Otherwise put, the idea is to construct the whole reality from transcendently reduced data. This is his way of taking up Descartes's problem about the reality of "the external world," the world of bodies and other minds. The philosophical motivation, one may safely suppose, is the one common to all forms of subjective idealism. It is to avoid the paradox Berkeley saw in Descartes.

Husserl's theory of transcendental subjectivity is not original with him. He is cognizant of the sorts of considerations that Hume and Kant were trying to take account of. Hume said: ". . . when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never catch *myself* at any time without a perception, and never can observe anything but the perception." Consistent with his brand of empiricism, Hume took this correct observation to imply that there is no such thing as a self. But his denial is paradoxical at least in the sense that the denial presupposes the existence of that which is being denied. Kant came to the opposite conclusion from Hume. We have to admit the reality of the transcendental self, said Kant, and Husserl follows Kant in this.

Thus, having been an antipsychologistic "realist" in the *Logical Investigations*, and having passed through a period of Platonic realism, Husserl ended as a radical subjectivist. For transcendental subjectivity led Husserl to a sort of subjective idealism. Husserl thought of his "transcendental-phenomenological idealism" as a strictly demonstrable position. He seems to have reasoned as follows: "The world" cannot be thought of except as being "constituted" by the transcendental ego's intentional acts. It follows, says Husserl, that nothing can exist if it is not dependent for its existence on the transcendental self. This implies that the essences emerging as residues at the end of phenomenological and transcendental reduction as well as bodies and other minds are existentially dependent upon the transcendental ego.

This sort of inference is characteristic of subjective idealism, and it is obviously invalid without further supplementation. There is an ambiguity in the phrase "being constituted." If it means *being brought into existence*, the premise is a patent falsehood. Many people think of "the world" as existing before there were any transcendental selves. Husserl needs a correct argument, nowhere given by him or any subjective idealist, to prove that to think this is logically inconsistent. If, however, the phrase "being constituted" means *being knowable*, then from the tautology that to be thought of as knowable is to be thought of as being capable of being accessible to a knower, it does not follow that nothing can exist if it is not dependent for its existence on the transcendental self. So far, then, Husserl has not created a "scientific" and unassailable "phenomenological idealism." Husserl carries his argument further. He says that the transcendental self itself is not existentially dependent upon anything else; and, therefore, the only real absolute is the transcendental ego, all else being existentially dependent on it (relative to it). But the final conclusion that the real absolute is transcendental subjectivity does not follow from the argument. For

we have not been shown that everything else in the world is existentially dependent upon the transcendental self. The final phase of Husserl's philosophy is thus subject to the standard criticisms against classical forms of subjective idealism.

The basic difficulty with the philosophical method Husserl preaches stems from its ultimate reliance on intuition. This can be nicely illustrated by recalling the earlier comparison of G. E. Moore's better philosophical *practice* with his impossible *theory* of philosophical analysis. A good example is the "naturalistic fallacy" argument in Chapter I of *Principia Ethica*. Whenever Moore invites us to take a Husserlian intuitive "look" at the object good so that we can immediately "see" its simplicity, we are stymied. Philosophical communication comes to a dead standstill. It is only when, following his analytical instincts and forgetting his queer *analysanda*, Moore digs at uncovering the ways in which expressions such as "good" and "bad" function in the language of evaluation that we return to the philosophical dialectic and find great logical insights under the morass of meanderings and confusions. It has been suggested that "Husserl's fundamental contributions are much simpler than they at first appear to be. Thus there is little more to his transcendental ἐποχή and examination of essences than a determination to examine the meaning of common concepts and ordinary beliefs rather than to add factual detail to our knowledge. His program is, in fact, not very different from that of modern British and United States analytic philosophy."¹⁰ There is some truth in these remarks. Husserl's detailed and valuable analyses of perceiving, believing, valuing, feeling, consciousness, and evidence in the early *Logische Untersuchungen* and the later *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie*¹¹ may, without distortion, be taken as making conceptual points, that is, points about the logic of discourse. Thus, in *practice*, a good deal of Husserl's work is not unlike that of English-speaking analysts. But Husserl's *theory* of philosophical method, the phenomenological method, with its ultimate reliance on intuiting the essence of this or that entity is radically different from what philosophical method is conceived to be by many British or United States philosophers, particularly those who have been in some way influenced by Wittgenstein in his post-*Tractatus* period.

The phenomenological method with its ultimate appeal to intuition, not to the logic of language, makes *argument* impossible. As a way of *proving* anything, it is simply inadequate. In this connection it is worth recalling the remarks made earlier about Husserl's attack on psychologism in the *Logische Untersuchungen*. His appeals to intuiting necessary connections among abstract entities such as essences and propositions are weak in comparison with the argument that psychologism is viciously circular. *That* argument is not connected with the phenomenological attitude as such.

Husserl's *theory* of philosophical method involves two further and related difficulties. First, it is rather uncritical of Husserl to assume that there are, independently of any linguistic context, objects that are epistemologically absolute data. This is the Husserlian counterpart of logical atomism's assumption of ultimate absolute simples out of which "the world" is to be "logically constructed." The generic view that there are absolute rock-bottom elements has

been powerfully criticized in the recent literature, for example, in Wittgenstein's *Philosophical Investigations* (see pp. 498-499). Second, the shifting of the burden away from language and upon the self-evidently given indicates a somewhat naive view of the role of language: "we can make our speech conform in a pure measure to what is intuited in its full clarity," writes Husserl, as if language were the sort of thing that the phenomenologist could create at will in the image of ultimate facts.

That Husserl's work should be controversial and not altogether lucid is not an anomaly in philosophy. But it is no less philosophically interesting for these reasons.

G. N.

References

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5. See editor's Introduction to *Die Idee der Phänomenologie* (Husserliana II), The Hague, Nijhoff, 1958.
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7. English translation in R. M. Chisholm, *op. cit.*
8. R. M. Chisholm, *Perceiving*, Ithaca, Cornell University Press, 1957.
9. Ludwig Wittgenstein, *Philosophical Investigations*, Oxford, Blackwell, 1953. Cf. Part I, Sections 153, 165-172, 202, 232. See also Paul Feyerabend, "Wittgenstein's Philosophical Investigations," *Philosophical Review*, LXIV (July, 1955), esp. 456-460.
10. See J. N. Findlay's article on phenomenology in *Encyclopaedia Britannica*, London, 1959, 14th edition.
11. An English transcription of the *Logische Untersuchungen*, together with a discussion of Husserl's ideas, form the bulk of Marvin Farber's *The Foundations of Phenomenology* (see reference 4). This is a basic source book on

Husserl. A more recent and equally basic source book is Farber's *Naturalism and Subjectivism*, Springfield, Ill., Charles C Thomas, 1959. The *Ideen* appeared in translation under the title *Ideas: General Introduction to Pure Phenomenology*, Boyce-Gibson (trans.), New York, The Macmillan Co., 1931.

The Idea of Phenomenology

by EDMUND HUSSERL

THE TRAIN OF THOUGHTS IN THE LECTURES

Natural thinking in science and everyday life is untroubled by the difficulties concerning the possibility of cognition. *Philosophical thinking* is circumscribed by one's position toward the problems concerning the possibility of cognition. The perplexities in which reflection about the possibility of a cognition that "gets at" the things themselves becomes entangled: How can we be sure that cognition accords with things as they exist in themselves, that it "gets at them"? What do things in themselves care about our ways of thinking and the logical rules governing them? These are laws of how we think; they are psychological laws—Biologism, psychological laws as laws of adaptation.

Absurdity: to begin with, when we think naturally about cognition and fit it and its achievements into the natural ways of thinking which pertains to the sciences we arrive at theories that are appealing at first. But they end in contradiction or absurdity—Inclination to open scepticism.

Even this attempt to look at these problems scientifically we can call "theory of knowledge." At any rate what emerges is the idea of a theory of knowledge as a science which solves the above-mentioned difficulties, gives us an ultimate, clear, therefore inherently consistent insight into the essence of cognition and the possibility of its achievements. The critique of cognition in this sense is the condition of the possibility of a metaphysics.

The *method* of the critique of cognition is the phenomenological method, phenomenology as the general doctrine of essences, within which the science of the essence of cognition finds its place.

From *Die Idee der Phänomenologie* (*Husserliana* II), Walter Biemel (ed.), The Hague, 1958, 2nd edition; translated by George Nakhnikian and William P. Alston.

What sort of method is this? How can a science of cognition be established if cognition in general, what cognizing means and can accomplish, is questioned? What method can here reach the goal?

¶ A. The First Step in the Phenomenological Orientation

1. Right away we become dubious whether such a science is at all possible. If it questions all cognition, every cognition chosen as a starting point is questioned. How then can it ever begin?

This, however, is only a specious difficulty. In "being called into question," cognition is neither *disavowed* nor regarded as in *every* sense doubtful. The question is about some accomplishments imputed to cognition, whereas in fact it is even an open question whether the difficulties pertain to all possible types of cognition. At any rate, if the theory of knowledge is to concern itself with the possibility of cognition it must have cognitions of the possibilities of cognition which, as such, are beyond question; indeed, cognitions in the fullest sense, cognitions about which absolutely no doubt of their having reached their objects is possible. If we are uncertain or unclear as to how it is possible for cognition to reach its object, and if we are inclined to doubt that such a thing is possible, we must, first of all, have before us indubitable examples of cognitions or possible cognitions which really reach, or would reach, their respective objects. At the outset we must not take anything as a cognition just because it seems to be one; otherwise we would have no possible, or what comes to the same thing, no sensible objective.

Here the *Cartesian method of doubt* provides a starting point. Without doubt there is *cogitatio*, there is, namely, the mental process during the [subject's] undergoing it and in a simple reflection upon it. The seeing, direct grasping and having of the *cogitatio* is already a cognition. The *cogitationes* are the first absolute data.

2. What follows naturally is our *first question in the theory of knowledge*: What distinguishes the certainty in these examples from the uncertainty in other instances of alleged cognition? Why is there in certain cases a tendency toward scepticism and toward asking the sceptical question: How can cognition reach a being, and why is there not this doubt and this difficulty in connection with the *cogitationes*?

People answer at first—that is indeed the answer ready at hand—in terms of the pair of concepts or words *immanence* and *transcendence*. The "seeing" cognition of the *cogitatio* is immanent. The cognition belonging to the objective sciences, the natural sciences and the sciences of culture (*Geisteswissenschaften*) and on closer inspection also the mathematical sciences, is transcendent. Involved in the objective sciences is the *doubtfulness of transcendence*, the question: How can cognition reach beyond itself? How can

it reach a being that is not to be found within the confines of consciousness? There is not this difficulty with the "seeing" cognition of the *cogitatio*.¹

3. Next, one is inclined to interpret, as if this were obvious, immanence as genuine immanence (*reelle Immanenz*)² and even perhaps to interpret it psychologically, as *immanence in something real* (*reale Immanenz*): the object of cognition too, is within the cognitive process as a real actuality, or in the [stream of] ego-consciousness of which the mental process is a part. That the cognitive act can hit upon and find its object in the same [stream of] consciousness and within the same real here and now, that is what is taken for granted. The neophyte will say, at this point, that the immanent is in me, the transcendent outside of me.

On a closer view, however, *genuine immanence* (*reelle Immanenz*) differs from *immanence in the sense of self-givenness as constituted in evidence* (*Evidenz*). The genuinely immanent (*reell Immanente*) is taken as the indubitable just on account of the fact that it presents nothing else, "points" to nothing "outside" itself, for what is here intended is fully and adequately given in itself. Any self-givenness other than that of the genuinely immanent (*reell Immanente*) is not yet in view.

4. So for the moment no distinction is made. The first step toward clarity now is this: the genuinely immanent (*reell Immanentes*), or what would here mean the same, the adequately self-given, is beyond question. I may make use of it. That which is transcendent (not genuinely immanent) I may not use. Therefore, I must accomplish a *phenomenological reduction*: *I must exclude all that is transcendentally posited*.

Why? [Because] if I am in the dark as to how cognition can reach that which is transcendent, not given in itself but "intended as being outside," no cognition or science of the transcendent can help to dispel the darkness. What I want is *clarity*. I want to understand *the possibility* of that reaching. But this, if we examine its sense, signifies: I want to come face to face with the essence of the possibility of that reaching. I want to make it given to me in an act of "seeing." A "seeing" cannot be demonstrated. The blind man who wishes to see cannot be made to see by means of scientific proofs. Physical and physiological theories about colors give no "seeing" (*schauende*) clarity about the meaning of color as those with eyesight have it. If, therefore, the critique of cognition is a science, as it doubtless is in the light of these considerations, a science which is to clarify

1. Tr. note: we have rendered Husserl's word *schauen* as "see," the point of the double quotes being that this use of "see" is broader than simply seeing with one's eyes.

2. Tr. note: *reelle Immanenz* has no straightforward translation. The distinction Husserl has in mind is the immanence of universals (essences) vs. the (*reelle*) immanence of mental occurrences and their *contents*, e.g., *cogitationes*, their contents; also, psychological occurrences such as toothaches. Everything (*reell*) immanent is existentially mind-dependent. Essences, on the other hand, are neither mental occurrences nor contents. They are intentionally nonexistent *objects* of cognitive acts, specifically of "seeings," but they are not ingredients of such acts. Their immanence is simply their *givenness* to "seeing."

all species and forms of cognition, *it can make no use of any science of the natural sort*. It cannot tie itself to the conclusions that any natural science has reached about what is. For it they remain in question. As far as the critique of cognition is concerned, all the sciences are only *phenomena of science*. Every tie of that sort signifies a defective *μετάβασις* (foundation). This comes about only by way of a mistaken but often seductive *shifting between problems*: between explaining cognition as a fact of nature in psychological and scientific terms and elucidating cognition in terms of its essential capabilities to accomplish its task. Accordingly, if we are to avoid this confusion and remain constantly mindful of the meaning of the question concerning these capabilities, we need *phenomenological reduction*.

This means: everything transcendent (that which is not given to me immanently) is to be assigned the index zero, i.e., its existence, its validity is not to be assumed as such, except at most as *the phenomenon of a claim to validity*. I am to treat all sciences only as phenomena, hence not as systems of valid truths, not as premises, not even as hypotheses for me to reach truth with. This applies to the whole of psychology and the whole of natural science. Meanwhile, the proper *meaning of our principle* is in the constant challenge to stay with the objects as they are in question *here* in the critique of cognition and not to confuse the problems *here* with quite different ones. The elucidation of the ways in which cognition is possible does not depend upon the ways of objective science. To bring knowledge to evident self-givenness and to seek to view the nature of its accomplishment does not mean to deduce, to make inductions, to calculate, etc. It is not the same as eliciting, with reasons, novel things from things already given or purportedly given.

¶ B. The Second Level of the Phenomenological Orientation

We now need a *new stratum of considerations* in order to achieve a higher level of clarity about the nature of phenomenological research and its problems.

1. First, the Cartesian *cogitatio* already requires the phenomenological reduction. The psychological phenomenon in psychological apperception and objectification is not a truly absolute datum. The truly absolute datum is the *pure phenomenon*, that which is reduced. The mentally active ego, the object, man in time, the thing among things, etc., are not absolute data; hence man's mental activity as his activity is no absolute datum either. *We abandon finally the standpoint of psychology, even of descriptive psychology*. And so what is also *reduced* is the question which initially drove us: no longer how can I, this man, contact in my mental processes something existing in itself, perhaps out there, beyond me; but we now replace this

hitherto ambiguous question, unstable and complex, because of its transcendent burden, with the *pure basic question*: How can the pure phenomenon of cognition reach something which is not immanent to it? How can the absolute self-givenness of cognition reach something not self-given, and how is this reaching to be understood?

At the same time the concept of *genuine immanence* (*reellen Immanenz*) is reduced. It no longer signifies immanence in something *real* (*reale Immanenz*), the immanence in human consciousness and in the *real* (*realen*) psychic phenomenon.

2. Once we have the “seen” phenomena, it seems that we already have a phenomenology, a science of these phenomena.

But as soon as we begin there, we notice a certain constriction. The field of absolute phenomena—taken one at a time—does not seem to be enough to fulfill our intentions. What good are single “seeings” to us, no matter how securely they bring our *cogitationes* to self-givenness? At first it seems beyond question that on the basis of these “seeings” we can undertake logical operations, can compare, contrast, subsume under concepts, predicate, although, as appears later, behind these operations stand new objectivities. But even if what here seems beyond question were taken for granted and considered no further, we could not understand how we could here arrive at universally valid findings of the sort we need.

But one thing seems to help us along: *eidetic abstraction*. It yields inspectable universals, species, essences, and so it seems to provide the redeeming idea: for do we not seek “seeing” clarity about the essence of cognition? Cognition belongs to the sphere of *cogitationes*. Accordingly, we must through “seeing” bring its universal objects into the consciousness of the universal. Thus it becomes possible to have a doctrine about the essence of cognition.

We take this step in agreement with a tenet of Descartes’s concerning *clear and distinct perceptions*. The “existence” of the *cogitatio* is guaranteed by its absolute *self-givenness*, by its givenness in *pure evidence* (*Evidenz*). Whenever we have pure evidence (*Evidenz*), the pure viewing and grasping of something objective directly and in itself, we have the same guarantees, the same certainties.

This step gave us a new objectivity as absolutely given, i.e., the *objectivity of essences*; and as to begin with the logical acts which find expression in assertions based upon what is intuited remain unnoticed, so now we get the field of *assertions about essences*, viz., of what is generally the case as given in pure “seeing.” That is to say at first undifferentiated from the individually given universal objects.

3. Yet do we now have everything; do we have the fully delineated phenomenology and the clear self-evidence to put us in the position of having what we need for the critique of cognition? And are we clear about the issues to be resolved?

No, the step we took leads us further. It makes clear to us in the first

place that *genuine (reell) immanence* (and the same is true of transcendence) is but a special case of the *broader concept of immanence as such*. No longer is it a commonplace and taken on face value that *the absolutely given* and the *genuinely immanent* are one and the same. For that which is universal is absolutely given but is not genuinely immanent. *The act of cognizing* the universal is something singular. At any given time, it is a moment in the stream of consciousness. *The universal itself*, which is given in evidence (*Evidenz*) within the stream of consciousness is nothing singular but just a universal, and in the *genuine (reellen)* sense it is transcendent.

Consequently, the idea of *phenomenological reduction* acquires a more immediate and more profound determination and a clearer meaning. It means not the exclusion of the genuinely transcendent (perhaps even in some psychologico-empirical sense), but the exclusion of the transcendent as such as something to be accepted as existent, i.e., everything that is not evident givenness in its true sense, that is not absolutely given to pure "seeing." But, of course, everything of what we said remains. Inductive or deductive scientific conclusions or facets, etc., from hypotheses, facts, axioms, remain excluded and are allowed only as "phenomena"; and the same with all reference to any "knowing" and "cognition": inquiry must concern itself always with *pure "seeing"* and, therefore, not with the genuinely immanent. It is inquiry within the sphere of pure evidence, inquiry into essences. We also said that its field is the *a priori within absolute self-givenness*.

Thus the field is now characterized. It is a field of absolute cognitions, within which the ego and the world and God and the mathematical manifolds and whatever else may be a scientifically objective matter are held in abeyance, cognitions which are, therefore, also not dependent on these matters, which are valid in their own right, whether we are sceptics with regard to the others or not. All that remains as it is. The root of the matter, however, is *to grasp the meaning of the absolutely given, the absolute clarity of the given*, which excludes every meaningful doubt, in a word, *to grasp the absolutely "seeing" evidence which gets hold of itself*. To a certain extent in the discovery of all this lies the historical significance of the Cartesian method of doubt. But for Descartes to discover and to abandon were the same. We do nothing but clearly formulate and develop consistently what was always implicit in this age-old project. We part company in this connection with psychologistic interpretations of evidence in terms of feelings.

¶ C. The Third Level of the Phenomenological Orientation

Once more we need a new level of considerations, to give us greater clarity about the meaning of phenomenology and to develop further its problems.

How far does self-givenness reach? Is it contained in the givenness of the *cogitatio* and in the ideations which grasp it in its generality? Our phenomenological sphere, the sphere of absolute clarity, of immanence in the true sense, reaches no farther than self-givenness reaches.

We are once again led somewhat deeper, and in depths lie the obscurities and in the obscurities lie the problems.

Everything seemed at first simple and hardly requiring hard work. The prejudice about immanence as genuine immanence, as if the latter were what mattered, one may cast off, and yet one remains at first wedded to genuine immanence, at least in a certain sense. It seems, at first, that in "seeing" essences we have only to grasp in its generality the genuinely immanent in the *cogitationes* and to establish the connections rooted in essences. This, too, seems an easy matter. We reflect; we look back at our own acts; we appraise their genuine contents, as they are, only under phenomenological reduction. This appears to be the sole difficulty. And now, of course, there is nothing further than to lift that which is "seen" into consciousness of universality.

The matter, however, becomes less cozy when we take a closer look at the data. First, the *cogitationes*, which we regard as simple data and in no way mysterious, hide all sorts of transcendencies.

If we look closer and notice how in the mental process, say of [perceiving] a sound, even after phenomenological reduction, *appearance and that which appears stand in contrast*, and this *in the midst of pure givenness*, hence in the midst of true immanence, then we are taken aback. Perhaps the sound lasts. We have there the patently given unity of the sound and its duration with its temporal phases, the present and the past. On the other hand, when we reflect, the phenomenon of enduring sound, itself a temporal phenomenon, has its own now-phase and past phases. And if one picks out a now-phase of the phenomenon there is not only the objective now of the sound itself, but the now of the sound is but a point in the duration of a sound.

Detailed analyses will be given in the course of our special tasks. The above suggestion is enough to call attention to a new point: that the phenomenon of sound perception, even as evident and reduced, demands within the immanent a distinction between *appearance* and *that which appears*. We thus have two absolute data, the givenness of the appearing and the givenness of the object; and the object within this immanence is not immanent in the sense of genuine immanence; it is not a concrete part (*Stück*) of the appearance, i.e., the past phases of the enduring sound are now still objective and yet they are not genuinely contained in the present moment of the appearance. Therefore, we also find in the case of the phenomenon of perception what we found in the case of consciousness of universals, namely, that it is a consciousness which constitutes something

self-given which is not contained within what is occurring [in the world] and is not at all found as *cogitatio*.

At the lowest level of reflection, the naive level, at first it seems as if evidence were a matter of simple "seeing," a mental inspection without a character of its own, always one and the same and in itself undifferentiated: the "seeing" just "sees" the things (*Sachen*), the things are simply there and in the truly evident "seeing" they are there in consciousness, and "seeing" is simply to "see" them. Or, to use our previous simile: a direct grasping or taking or pointing to something that simply is and is there. All difference is thus in the things that exist in themselves and have their differences through themselves.

And now how different the "seeing" of things shows itself to be on closer analysis. Even if we retain under the heading of attention the notion of an undifferentiated and in itself no further describable "seeing," it is, nevertheless, apparent that it really makes no sense at all to talk about things which are "simply there" and just need to be "seen." On the contrary, this "simply being there" consists of certain mental processes of specific and changing structure, such as perception, imagination, memory, predication, etc., and in them the things are not contained as in a hull or vessel. Instead, the things come to be *constituted* in these mental processes, although in reality they are not at all to be found in them. For "things to be given" is for them to be *exhibited* (represented) as so and so in such phenomena. And this is not to say that the things once more exist in themselves and "send their representatives into consciousness." This sort of thing cannot occur to us within the sphere of phenomenological reduction. Instead, the things are and are given in appearance and in virtue of the appearance itself; though they are, or are taken as, individually separable from the appearance, they are essentially inseparable from it insofar as the single appearance (the consciousness of the given) is not in question.

Thus this marvelous correlation between the *phenomenon of cognition* and the *object of cognition* reveals itself everywhere. Now let us notice that the task of phenomenology, or rather the area of its tasks and inquiries, is no such trivial thing as merely looking, merely opening one's eyes. Already in the first and simplest cases, in the lowest forms of cognition, the greatest difficulties confront pure analysis and the inspection of essences. It is easy to talk of correlation in general but it is very difficult to clarify the way in which an object of cognition *constitutes* itself in cognition. And the task is just this: within the framework of pure evidence (*Evidenz*) or self-givenness *to trace all forms of givenness and all correlations* and to conduct an elucidatory analysis. Of course, to do this we need to take account not only of single acts but also of their complexities, of the consistency or inconsistency of their connections and of the intentions (*Teleologien*) apparent in them. These connections are not conglomerations but distinctively connected and as it were congruent unities, and unities of cognition, which, as unities of

cognition have also their unitary objective correlates. Thus they belong themselves to the *cognitive acts*, their types are cognitive types, their native forms are forms of thought and forms of intuition (the word not here to be taken in its Kantian sense).

It now remains to trace step by step the data in all their modifications, those that are, properly speaking, data and those that are not, the simple and the compounded ones, those that so to say are constituted at once and those that essentially are built up stepwise, those that are absolutely valid and those that in the process of cognition acquire givenness and validity in an unlimited progression.

We finally arrive in this way at an understanding of how the transcendent real object can be met (can be known in its nature) in the cognitive act as that which one primarily means by it, and how the sense of this meaning is filled out step by step in a developing cognitive context (if only it has the proper forms which belong to the constitution of the object of experience). We then understand how the object of experience is progressively constituted, and how this manner of being constituted is prescribed. We understand that such a stepwise constitution is required by the very essence of the experienced object.

Along this path one approaches the methodological forms which determine all the sciences and are constitutive of all scientifically given objects, and so also the elucidation of the theory of science and with it implicitly the elucidation of all the sciences; however, only implicitly, i.e., it is only once this enormous work of elucidation has been accomplished that the critique of cognition will be fit to become a critique of the specialized sciences and thereby to evaluate them metaphysically.

These then are the problems of givenness, the problems of the *constitution of objects of all sorts within cognition*. The phenomenology of cognition is the science of cognitive phenomena in two senses. On the one hand it has to do with cognitions as appearances, presentations, acts of consciousness in which this or that object is presented, is an object of consciousness, passively or actively. On the other hand, the phenomenology of cognition has to do with these objects as presenting themselves in this manner. The word "phenomenon" is ambiguous in virtue of the essential correlation between *appearance and that which appears*. Φαινόμενον (phenomenon) in its proper sense means that which appears, and yet it is by preference used for the appearing itself, for the subjective phenomenon (if one may use this expression which is apt to be misunderstood in the vulgar psychological sense).

In reflection, the *cogitatio*, the appearing itself, becomes an object, and this encourages the rise of ambiguity. Finally, we need not repeat once more that in speaking about investigating the objects and modes of cognition, we always mean investigation into essences, which, in the sphere of the absolutely given, exhibits in a general way the ultimate meaning, the pos-

sibility, the essence of the objectivity of cognition and of the cognition of objects.

It goes without saying that the *general phenomenology of reason* has to solve also the parallel problems of the correlation between *valuing* and the *things valued*, etc. If the word "phenomenology" were used so broadly as to cover the analysis of everything self-given, the incoherent data would become coherent: analyzing sense-given entities according to their various kinds, etc.—the common element is then in the methodology of the analysis of essences within the sphere of immediate evidence.

LECTURE I

[THE NATURAL ATTITUDE IN THINKING AND SCIENCE OF THE NATURAL SORT. THE PHILOSOPHIC (REFLECTIVE) ATTITUDE IN THINKING. THE CONTRADICTIONS OF REFLECTION ON COGNITION, WHEN ONE REFLECTS IN THE NATURAL ATTITUDE, THE DUAL TASK OF TRUE CRITICISM OF COGNITION. TRUE CRITICISM OF COGNITION AS PHENOMENOLOGY OF COGNITION. THE NEW DIMENSION BELONGING TO PHILOSOPHY; ITS PECULIAR METHOD IN CONTRAST TO SCIENCE.]

In earlier lectures I distinguished between *science of the natural sort* and *philosophic science*. The former originates from the natural, the latter from the philosophic attitude of mind.

The *natural attitude of mind* is as yet unconcerned with the critique of cognition. Whether in the act of intuiting or in the act of thinking, in the natural mode of reflection we are turned to *the objects* as they are given to us each time and as a matter of course, even though they are given in different ways and in different modes of being, according to the source and level of our cognition. In perception, for instance, a thing stands before our eyes as a matter of course. It is there, among other things, living or lifeless, animate or inanimate. It is, in short, within a world of which part is perceived, as are the individual things themselves, and of which part is contextually supplied by memory from whence it spreads out into the indeterminate and the unknown.

Our judgments relate to this world. We make (sometimes singular, sometimes universal) judgments about things, their relations, their changes, about the conditions which functionally determine their changes and about the laws of their variations. We find an expression for what immediate experience presents. In line with our experiential motives we draw inferences from the directly experienced (perceived and remembered) to what is not experienced. We generalize, and then apply again general knowledge to particular cases or deduce analytically new generalizations from general knowledge. Isolated cognitions do not simply follow each other in the manner of mere succession. They enter into logical relations with each

other, they follow from one another, they "cohere" with one another, they support one another, thereby strengthening their logical power.

On the other hand, they also clash and contradict one another. They do not agree with one another, they are falsified by *assured* cognition, and their claim to be cognition is discredited. Perhaps the contradictions arise in the sphere that belongs to laws governing the pure predicational form: we have equivocated, we have inferred fallaciously, we have miscounted or miscomputed. In these cases we restore formal consistency. We resolve the equivocation and the like.

Or the contradictions disturb our expectation of connections based on past experience: empirical evidence conflicts with empirical evidence. Where do we look for help? We now weigh the reasons for different possible ways of deciding or providing an explanation. The weaker must give way to the stronger, and the stronger, in turn, are of value as long as they will stand up, i.e., as long as they in turn do not have to come into a similar logical conflict with new cognitional motives introduced by a broader sphere of cognition.

Thus, natural knowledge makes strides. It progressively takes possession of a reality at first existing for us as a matter of course and as something to be investigated further as regards its extent and content, its elements, its relations and laws. Thus the various sciences of the natural sort (*natürlichen Wissenschaften*) come into being and flourish, the natural sciences (*Naturwissenschaften*) as the sciences of physics and psychology, the sciences of culture (*Geisteswissenschaften*) and, on the other side, the mathematical sciences, the sciences of numbers, classes, relations, etc. The latter sciences deal not with actual but rather with ideal objects; they deal with what is valid *per se*, and for the rest with what are from the first unquestionable possibilities.

In every step of natural cognition pertaining to the sciences of the natural sort, difficulties arise and are resolved, either by *pure logic* or by appeal to *facts*, on the basis of motives or reasons which lie in the things themselves and which, as it were, come from things in the form of *requirements* that they themselves make on our thinking.

Now let us contrast the natural *mode* (or *habit*) of *reflection* with the *philosophical*.

With the awakening of reflection about the relation of cognition to its object, abysmal difficulties arise. Cognition, the thing most taken for granted in natural thinking, suddenly emerges as a mystery. But I must be more exact. What is *taken for granted* in natural thinking is the possibility of cognition. Constantly busy producing results, advancing from discovery to discovery in newer and newer branches of science, natural thinking finds no occasion to raise the question of the possibility of cognition as such. To be sure, as with everything else in the world, *cognition*, too, will appear as a problem in a *certain manner*, becoming an object of natural investigation.

Cognition is a fact in nature. It is the experience of a cognizing organic being. It is a psychological fact. As any psychological fact, it can be described according to its kinds and internal connections, and its genetic relations can be investigated. On the other hand cognition is essentially *cognition of what objectively is*; and it is cognition through the *meaning* which is intrinsic to it; by virtue of this meaning it is *related* to what objectively is. Natural thinking is also already active in this relating. It investigates in their *formal* generality the *a priori* connections of meanings and postulated meanings and the *a priori* principles which belong to objectivity *as such*; there comes into being a *pure grammar* and at higher stages a pure logic (a whole complex of disciplines owing to its different possible delimitations), and there arises once more a normative and practical logic in the form of an art of thinking, and, especially, of scientific thinking.

So far, we are still in the realm of *natural* thinking.

However, the correlation between cognition as mental process, its referent (*Bedeutung*) and what objectively is, which has just been touched upon in order to contrast the psychology of cognition with pure logic and ontology, is the source of the deepest and most difficult problems. Taken collectively, they are the problem of the possibility of cognition.

Cognition in all of its manifestations is a psychic act; it is the cognition of a cognizing subject. The objects cognized stand over and against the cognition. But how can we be certain of the correspondence between cognition and the object cognized? How can knowledge transcend itself and reach its object reliably? The unproblematic manner in which the object of cognition is given to natural thought to be cognized now becomes an enigma. In perception the perceived thing is believed to be directly given. Before my perceiving eyes stands the thing. I see it, and I grasp it. Yet the perceiving is simply a mental act of mine, of the perceiving subject. Likewise, memory and expectation are subjective processes; and so are all thought processes built upon them and through which we come to posit that something really is the case and to determine any *truth* about what is. How do I, the cognizing subject, know if I can ever really know, that there exist not only my own mental processes, these acts of cognizing, but also that which they apprehend? How can I ever know that there is anything at all which could be set over against cognition as its object?

Shall I say: only phenomena are truly given to the cognizing subject, he never does and never can break out of the circle of his own mental processes, so that in truth he could only say: I exist, and all that is not-I is mere phenomenon dissolving into phenomenal connections? Am I then to become a solipsist? This is a hard requirement. Shall I, with Hume, reduce all transcendent objectivity to fictions lending themselves to psychological explanation but to no rational justification? But this, too, is a hard requirement. Does not Hume's psychology, along with any psychology, transcend the sphere of immanence? By working with such concepts as habit, human

nature, sense-organ, stimulus and the like, is it not working with transcendent existences (and transcendent by its own avowal), while its aim is to degrade to the status of fictions everything that transcends actual "impressions" and "ideas"?

But what is the use of invoking the specter of contradictions when *logic itself is in question* and becomes problematic. *Indeed, the real meaning of logical lawfulness* which natural thinking would not dream of questioning, now becomes *problematic* and *dubious*. Thoughts of a biological order intrude. We are reminded of the modern theory of evolution, according to which man has evolved in the struggle for existence and by natural selection, and with him his intellect too has evolved naturally and along with his intellect all of its characteristic forms, particularly the logical forms. Accordingly, is it not the case that the logical forms and laws express the accidental peculiarity of the human species, which could have been different and which will be different in the course of future evolution? Cognition is, after all, only *human cognition*, bound up with *human intellectual forms*, and unfit to reach the very nature of things, to reach the things in themselves.

But at once another piece of absurdity arises. Can the cognitions by which such a view operates and the possibilities which it ponders make any sense themselves if the laws of logic are given over to such relativism? Does not the truth that there is this and that possibility implicitly presuppose the absolute validity of the principle of non-contradiction, according to which any given truth excludes its contradictory?

These examples should suffice. The possibility of cognition has become enigmatic throughout. If we immerse ourselves in the sciences of the natural sort, we find everything clear and comprehensible, to the extent to which they have developed into exact sciences. We are certain that we are in possession of objective truth, based upon reliable methods of reaching (objective) reality. But whenever we reflect, we fall into errors and confusions. We become entangled in patent difficulties and even self-contradictions. We are in constant danger of becoming sceptics, or still worse, we are in danger of falling into any one of a number of scepticisms all of which have, sad to say, one and the same characteristic: absurdity.

The playground of these unclear and inconsistent theories as well as the endless quarrels associated with them is the *theory of knowledge*, and *metaphysics* which is bound up with it historically and in subject matter. The task of the theory of knowledge or the critique of theoretical reason is, first of all, a critical one. It must brand the well-nigh inevitable mistakes which ordinary reflection makes about the relation of cognition, its meaning and its object, thereby refuting the concealed as well as the unconcealed sceptical theories concerning the essence of cognition by demonstrating their absurdity.

Furthermore, the positive task of the theory of knowledge is to solve the

problems of the relations among cognition, its meaning and its object by inquiring into the essence of cognition. Among these, there is the problem of explicating the essential meaning of being a cognizable object or, what comes to the same thing, of being an object at all: of the meaning which is prescribed (for being an object at all) by the correlation *a priori* (or essential correlation) between cognition and being an object of cognition. And this naturally applies also to all basic forms of being an object which are pre-determined by the nature of cognition. (To the ontological, the apophantic³ as well as the metaphysical forms.)

Precisely by solving these problems the theory of knowledge qualifies as the critique of cognition, more exactly, as *the critique of natural cognition* in all the sciences of a natural sort. It puts us, in other words, in a position to interpret in an accurate and definitive way the teachings of these sciences about what exists. For the confusions of the theory of knowledge into which we are led by natural (pre-epistemological) reflection on the possibility of cognition (on the possibility of cognition's reaching its object) involve not just false views about the essence of cognition, but also self-contradictory, and, therefore, fundamentally misleading *interpretations* of the being that is cognized in the sciences of the natural sort. So, one and the same science is interpreted in materialistic, spiritualistic, dualistic, psychomonic, positivistic and many other ways, depending upon what interpretation is thought to be the necessary consequence of those pre-epistemological reflections. Only with epistemological reflection do we arrive at the distinction between the sciences of a natural sort and philosophy. Epistemological reflection first brings to light that the sciences of a natural sort are not yet the ultimate science of being. We need a science of being in the absolute sense. This science, which we call *metaphysics*, grows out of a "critique" of natural cognition in the individual sciences. It is based on what is learned in the general critique of cognition about the essence of cognition and what it is to be an object of cognition of one basic type or other, i.e., in accordance with the different fundamental correlations between cognizing and being an object of cognition.

If then we disregard any metaphysical purpose of the critique of cognition and confine ourselves purely to the task of *clarifying the essence of cognition and of being an object of cognition, then this will be phenomenology of cognition and of being an object of cognition* and will be the first and principal part of phenomenology as a whole.

Phenomenology: this denotes a science, a system of scientific disciplines. But it also and above all denotes a method and an attitude of mind, the specifically *philosophical attitude* of mind, the specifically *philosophical method*.

In contemporary philosophy, insofar as it claims to be a serious science,

3. Tr. note: In Husserl the word "apophantic" refers to predicative judgments or to the theory of such judgments.

it has become almost a commonplace that there can be only one method for achieving cognition in all the sciences as well as in philosophy. This conviction accords wholly with the great philosophical traditions of the seventeenth century, which also thought that philosophy's salvation lay wholly in its taking as a model of method the exact sciences, and above all, mathematics and mathematical natural science. This putting philosophy methodologically on a par with the other sciences goes hand in hand with treating them alike with respect to subject matter. It is still the prevailing opinion that philosophy and, more specifically, ontology and the general theory of knowledge not only relate to all the other sciences, but also that they can be grounded upon the conclusions of those other sciences: in the same way in which sciences are built upon one another, and the conclusions of one of them can serve as premises for the others. I am reminded of the favorite ploy of basing the theory of knowledge on the psychology of cognition and biology. In our day, reactions against these fatal prejudices are multiplying. And prejudices they are.

In the sphere of ordinary inquiry one science can readily build upon another, and the one can serve the other as a model of method even though to a limited extent determined by the nature of the areas of inquiry in question. *But philosophy lies in a wholly new dimension.* It needs an *entirely new point of departure* and an entirely new method distinguishing it in principle from any "natural" science. This is why the logical procedures that give the sciences of a natural sort unity have a unitary character in principle in spite of the special methods which change from one science to another: while the methodological procedures of philosophy have by contrast and in principle a new unity. This is also why *pure* philosophy, within the whole of the critique of cognition and the "critical" disciplines generally, must disregard, and must refrain from using, the intellectual achievements of the sciences of a natural sort and of scientifically undisciplined natural wisdom and knowledge.

To anticipate, this doctrine, the grounds for which will be given in more detail in the sequel, is recommended by the following considerations.

In the sceptical mood which critical reflection about cognition necessarily begets (I mean the reflection that comes first, the one that comes before the scientific critique of cognition and which takes place on the natural level of thought) every science of the natural sort and every method characteristic of such a science ceases to count as something we properly possess. For cognition's reaching its object has become enigmatic and dubious as far as its meaning and possibility are concerned, and exact cognition becomes thereby no less enigmatic than inexact, scientific knowledge no less than the pre-scientific. The possibility of cognition becomes questionable, more precisely, how it can possibly reach an objectivity which, after all, is in itself whatever it is. Behind this lies the following: What is in question is what cognition can accomplish, the meaning of its claim to validity and correct-

ness, the meaning of the distinction between valid real and merely apparent cognition; on the other hand, also the meaning of being an object which exists and exists as what it is whether it is cognized or not and which as an object is an object of possible cognition, in principle cognizable, even if in fact it has never been and never will be cognized, but is in principle perceptible, imaginable, determinable by predicates in a possible judgment, etc.

However, it is impossible to see how working with presuppositions which are taken from natural cognition, no matter how "exactly founded" they are in it, can help us to resolve the misgivings which arise in the critique of cognition, to find the answers to its problems. If the meaning and value of natural cognition *as such* together with *all* of its methodological presuppositions and all of its exact foundations have become problematic, then this strikes at every proposition which natural cognition presupposes in its starting-point and at every allegedly exact method of giving a foundation. Neither the most exact mathematics nor mathematical natural science has here the slightest advantage over any actual or alleged cognition through ordinary experience. It is then clear that there can be no such talk as that philosophy (which begins in the critique of cognition and which, whatever else it is, is rooted in the critique of cognition) has to model itself after the exact sciences methodologically (or even as regards subject matter!), or that it has to adopt as a standard their methodology, or that it is philosophy's task to implement and to complete the work done in the exact sciences according to a single method, in principle the same for all the sciences. In contradistinction to all natural cognition, philosophy lies, I repeat, within a *new dimension*; and what corresponds to this new dimension, even if, as the phrase suggests, it is essentially connected with the old dimensions, is a *new and radically new method* which is set over against the "natural" method. He who denies this has failed to understand entirely the whole of the level at which the characteristic problem of the critique of cognition lies, and with this he has failed to understand what philosophy really wants to do and should do, and what gives it its own character and authority *vis-à-vis* the whole of natural cognition and science of the natural sort.

LECTURE II

[THE BEGINNING OF THE CRITIQUE OF COGNITION; TREATING AS QUESTIONABLE EVERY (CLAIM TO) KNOWING. REACHING THE GROUND OF ABSOLUTE CERTAINTY IN PURSUANCE OF DESCARTES'S METHOD OF DOUBT. THE SPHERE OF THE THINGS THAT ARE ABSOLUTELY GIVEN. REVIEW AND AMPLIFICATION; REFUTATION OF THE ARGUMENT AGAINST THE POSSIBILITY OF A CRITIQUE OF COGNITION. THE RIDDLE OF NATURAL COGNITION: TRANSCENDENCE. DISTINCTION BETWEEN THE TWO CONCEPTS OF IMMANENCE AND TRANSCENDENCE. THE INITIAL PROBLEM OF THE CRITIQUE OF COGNITION: THE POSSIBILITY OF TRANSCENDENT COGNITION. THE PRINCIPLE OF EPISTEMOLOGICAL REDUCTION.]

At the outset of the critique of cognition the entire world of nature, physical and psychological, as well as one's own human self together with all the sciences which have to do with these objective matters, are *put in question*. Their being, their validity are left up in the air.

Now the question is: How can *the critique of cognition get under way*? The critique of cognition is the attempt of cognition to find a scientific understanding of itself and to establish objectively what cognition is in its essence, what is the meaning of the relation to an object which is implicit in the claim to cognition and what its objective validity or the reaching of its object comes to if it is to be cognition in the true sense. Although the *ἐποχή*,⁴ which the critique of cognition must employ, begins with the doubt of all cognition, its own included, it cannot remain in such doubt nor can it refuse to take as valid everything given, including that which it brings to light itself. If it must presuppose nothing as *already given*, then it must begin with some cognition which it does not take unexamined from elsewhere but rather gives to itself, which it itself posits as primal.

This primal cognition must contain nothing of the unclarity and the doubt which otherwise give to cognition the character of the enigmatic and problematic so that we are finally in the embarrassing position of having to say that cognition as such is a problem, something incomprehensible, in need of elucidation and dubious in its claims. Or, to speak differently: If we are not allowed to take anything as already given because our lack of clarity about cognition implies that we cannot understand what it could mean for something *to be known in itself yet in the context of cognition*, then it must after all be possible to make evident something which we have to acknowledge as absolutely given and indubitable; insofar, that is, as it is given with such complete clarity that every question about it will and must find an immediate answer.

And now we recall the Cartesian doubt. Reflecting on the multifarious possibilities of error and deception, I might reach such a degree of sceptical despair that I finally say: Nothing is certain, everything is doubtful. But it is at once evident that not everything is doubtful, for while I am judging that everything is doubtful, it is indubitable that I am so judging; and it would be absurd to want to persist in a universal doubt. And in every case of a definite doubt, it is indubitably certain that I have this doubt. And likewise with every *cogitatio*. Howsoever I perceive, imagine, judge, infer, howsoever these acts may be certain or uncertain, whether or not they have objects that exist as far as the perceiving itself is concerned, it is absolutely clear and certain that I am perceiving this or that, and as far as the judgment is concerned that I am judging of this or that, etc.

Descartes introduced these considerations for other purposes. But with suitable modifications, we can use them here.

4. Tr. note: *epoche*, the excluding of transcendencies posited by the "natural attitude."

If we inquire into the essence of cognition, then whatever status it and our doubts about its reaching the object may have one thing is clear: that cognition itself is a name for a manifold sphere of being which can be given to us absolutely, and which can be given absolutely each time in the particular case. The thought processes which I really perform are given to me insofar as I *reflect* upon them, receive them and set them up in a *pure "seeing."* I can speak vaguely about cognition, perception, imagination, experience, judgment, inference, etc.; but then, when I reflect, all that is given, and absolutely given at that, is this phenomenon of vaguely "talking about and intending cognition, experience, judgment, etc." Even this phenomenon of vagueness is one of those that comes under the heading of cognition in the broadest sense. I can, however, have an actual perception and inspect it. I can, moreover, represent to myself in imagination or memory a perception and survey it as so given to imagination. In that case I am no longer vacuously talking about perception or having a vague intension or idea of it. Instead, perception itself stands open to my inspection as actually or imaginatively given to me. And the same is true of every intellectual process, of every form of thinking and cognizing.

I have here put on the same level the "seeing" [act of] reflective perception and [the "seeing" act of reflective] imagination. If one followed the Cartesian view, one would have to emphasize perception first; it would in some measure correspond to the so-called inner perception of traditional epistemology, though this is an ambivalent concept.

Every intellectual process and indeed every mental process whatever, while being enacted, can be made the object of a pure "seeing" and understanding, and is something absolutely given in this "seeing." It is given as something that is, that is here and now, and whose being cannot be sensibly doubted. To be sure, I can wonder what sort of being this is and how this mode of being is related to other modes. It is true I can wonder what givenness means *here*, and reflecting further I can "see" the "seeing" itself in which this givenness, or this mode of being, is constituted. But all the same I am now working on an absolute foundation: namely, this perception is, and remains as long as it lasts, something absolute, something here and now, something that in itself is what it is, something by which I can measure as by an ultimate standard what being and being given can mean and here must mean, at least, obviously, as far as the sort of being and being given is concerned which a "here and now" exemplifies. And that goes for all specific ways of thinking, whenever they are given. All of these, however, can also be data in imagination; they can "as it were" stand before our eyes and yet not stand before them as actualities, as actually accomplished perceptions, judgments, etc.; even then, they are, in a certain sense, data. They are there *open to intuition*. We talk about them not in just vague hints and empty intention. We inspect them, and while inspecting them we can observe their essence, their constitution, their intrinsic character, and we

can make our speech conform in a pure measure to what is "seen" in its full clarity. But this requires to be supplemented by a discussion of the concept and cognition of essences.

For the moment we keep it firmly in mind that a sphere of the absolutely given can be indicated at the outset; and this is just the sphere we need if it is to be possible to aim at a theory of knowledge. Indeed, lack of clarity with regard to the meaning or essence of cognition requires a science of cognition, a science whose sole end is to clarify the essential nature of cognition. It is not to explain cognition as a psychological fact; it is not to inquire into the natural causes and laws of the development and occurrence of cognitions. Such inquiry is the task of a science of the natural sort, of a psychology which deals with the mental processes of persons who are undergoing them. Rather, the task of the critique of cognition is to clarify, to cast light upon, the essence of cognition and the legitimacy of its claim to validity that belongs to its essence; and what else can this mean but to make the essence of cognition directly self-given.

Recapitulation and Amplification. In its constantly successful progress in the various sciences, cognition of the natural sort is altogether self-assured that it reaches the object and has no cause to worry about the possibility of cognition and about the meaning of cognized objectivity. But as soon as we begin to reflect on the correlation between cognition and reality (and eventually also on the ideal meanings on the one hand and, on the other, on the objects of cognition) there arise difficulties, absurdities, inconsistent yet seemingly well-founded theories which drive one to the admission that the possibility of cognition as far as its reaching the object is concerned is an enigma.

A new science, the critique of cognition, is called for. Its job is to resolve confusions and to clarify the essence of cognition. Upon the success of this science depends the possibility of a metaphysics, a science of being in the absolute and fundamental sense. But how can such a science of cognition in general get started? That which a science questions it cannot use as a presupposition. But what is in question is the possibility of all cognition in that the critique of cognition regards as problematic the possibility of cognition in general and its capacity to reach the object. Once it is launched, the critique of cognition cannot take any cognition for granted. Nor can it take over anything whatever from pre-scientific cognition. All cognition bears the mark of being questionable.

Without some cognition given at the outset, there is also no advancement of cognition. The critique of cognition cannot, therefore, begin. There can be no such science at all.

I already suggested that in all this there is an element of truth. In the beginning no cognition can be assumed *without examination*. However, even if the critique of cognition must not take over any antecedent cognition it still can begin by *giving* itself cognition, and naturally cognition

which it does not base on, or logically derive from, anything else as this would presuppose some other immediate cognition already given. It must rather base itself on the cognition which is immediately evident and of such a kind that, as absolutely clear and indubitable, it excludes every doubt of its possibility and contains none of the puzzles which had led to all the sceptical confusions. I then pointed to the *Cartesian method of doubt* and to the domain of the absolutely given, viz., of absolute cognition which comes under the heading of evidence (*Evidenz*) of the *cogitatio*. It remained to be shown that the *immanence* of this cognition makes it an appropriate point of departure for the theory of cognition; that, furthermore, *because of this immanence*, it is free of the puzzlement which is the source of all sceptical embarrassment. Finally, it remained to be shown *that immanence is the generally necessary characteristic of all epistemological cognition*, and that it is nonsensical not only at the start but also in general to borrow from the sphere of transcendence, in other words, to try to found the theory of cognition on psychology or on any science whatever of the natural sort.

I may add the following: there is a plausible argument to the effect that the theory of knowledge cannot get started because it questions cognition as such and hence regards as questionable every cognition with which we might begin. Moreover, it is alleged that if all cognition must be a riddle to the epistemologist, so must any initial cognition with which epistemology itself begins be a riddle. I repeat that this plausible argument is a deception. The deception is due to the vague generality of the wording. Cognition in general "is questioned." Surely, however, it is not denied that there is cognition in general (such denial would lead to contradiction); rather, cognition presents a certain problem, namely, of how it can accomplish a certain task attributed to it, namely, the task of reaching the object: I may even doubt whether this task can be accomplished at all. But doubt as I may, this doubt is a first step toward canceling itself out because some cognitions can be brought to light which render such doubt groundless. Moreover, if I begin by not understanding cognition at all, then this incomprehension with its indeterminate universality admittedly encompasses every cognition. But that is not to say that every cognition I might run up against in the future has to remain forever incomprehensible. It may be that there is a big puzzle to begin with connected with a particular class of cognitions, those that thrust themselves most immediately to the fore, and that I now reach a general embarrassment and say: cognition as such is a riddle, even though it soon appears that the riddle does not belong to certain other kinds of cognition. And, as we shall see presently, this is indeed the case.

I said that the cognitions with which the critique of cognition must begin must contain nothing doubtful or questionable. They must contain none of that which precipitates epistemological confusion and gives impetus to the critique of cognition. We have to show that this holds true of the sphere

of the *cogitatio*. For this we need a more deeply probing reflection, one that will bring us substantial advantages.

If we look closer at what is so enigmatic and what, in the course of subsequent reflection on the possibility of cognition, causes embarrassment, we will find it to be the transcendence of cognition. All cognition of the natural sort, and especially the pre-scientific, is cognition which makes its object transcendent. It posits objects as existent, claims to reach matters of fact which are not "strictly given to it," are not "immanent" to it.

But on closer view, this *transcendence* is admittedly *ambiguous*. One thing one can mean by transcendence is that the object of cognition is not genuinely (*reell*) contained in the cognitive act so that one would be meaning by "being truly given" or "immanently given" that the object of the cognitive act is genuinely contained in the act: the cognitive act, the *cogitatio*, has genuine abstract parts genuinely constituting it: but the physical thing which it intends or supposedly perceives or remembers, etc., is, not to be found in the *cogitatio* itself, as a mental process; the physical thing is not to be found as a genuine (*reell*) concrete part (*Stück*), not as something which really exists within the *cogitatio*. So the question is: how can the mental process so to speak transcend itself? *Immanent here means then genuinely (reell) immanent in the cognitive mental process.*

But there is still *another transcendence* whose opposite is an altogether different immanence, namely, *absolute and clear givenness, self-givenness in the absolute sense*. This givenness, which rules out any meaningful doubt, consists of a simply immediate "seeing" and apprehending of the intended object itself as it is, and it constitutes the precise concept of evidence (*Evidenz*) understood as immediate evidence. All cognition which is not evident, which though it intends or posits something objective yet *does not see it itself*, is transcendent in this second sense. In such cognition we go beyond what at any time *is truly given*, beyond what can be *directly "seen"* and *apprehended*. At this point we may ask: How can cognition posit something as existing that is not directly and truly given in it?

At first, before we come to a deeper level of critical epistemological reflection, these two kinds of immanence and transcendence run confusedly into each other. It is indeed clear that whoever raises the first question about the possibility of genuine (*reell*) transcendence is at the same time really also raising the second question: namely, how can there be transcendence beyond the realm of evident givenness? In this there is the unspoken supposition that the only actually understandable, unquestionable, absolutely evident givenness is the givenness of *the abstract part genuinely (reell) contained* within the cognitive act, and this is why anything in the way of a cognized objectivity that is not genuinely (*reell*) contained within that act is regarded as a puzzle and as problematic. We shall soon hear that this is a fatal mistake.

One may now construe transcendence in one sense or the other, or, at

first even ambiguously, but transcendence is both the initial and the central problem of the critique of cognition. It is the riddle that stands in the path of cognition of the natural sort and is the incentive for new investigations. One could at the outset designate the solution to this problem as being the task of the critique of cognition. One would thereby delimit the new discipline in a preliminary fashion, instead of generally designating as its theme the problem of the essence of any cognition whatever.

If then the riddle connected with the initial establishment of the discipline lies *here*, it becomes more definitely clear what must not be claimed as presupposed. Nothing transcendent must be used as a presupposition. If I do not understand *how* it is possible that cognition reach something transcendent, then I also do not know *whether* it is possible. The scientific warrant for believing in a transcendent existence is of no help. For every mediated warrant goes back to something immediate; and it is the unmediated which contains the riddle.

Still someone might say: "It is certain that mediated no less than immediate cognition contains the riddle. But it is only the *how* that is puzzling, whereas the *that* is absolutely certain. No sensible man will doubt the existence of the world, and the sceptic in action belies his own creed." Very well. Then let us answer him with a more powerful and far-reaching argument. For it proves that the theory of cognition has, *neither at the outset nor throughout its course*, any license to fall back upon the content of the sciences of a natural sort which treat their object as transcendent. What is proved is the fundamental thesis *that the theory of knowledge can never be based upon any science of the natural sort, no matter what the more specific nature of that science may be*. Hence we ask: What will our opponent do with his transcendent knowledge? We put freely at his disposal the entire stock of transcendent truths contained in the objective sciences, and we take it that those truths are not altered by the emergence of the puzzle of how a science of the transcendent is possible. What will he now do with his all-embracing knowledge? How does he think he can go from the "that" to the "how"? That he knows for a fact that cognition of the transcendent is actual guarantees as logically obvious that cognition of the transcendent is possible. But the riddle is, *how* is it possible? Can he solve it even if he presupposes all the sciences, all or any cognition of the transcendent? Consider: What more does he really need? That cognition of the transcendent is possible he takes for granted, even as analytically certain in saying to himself, there is in my case knowledge of the transcendent. What he lacks is obvious. He is unclear about the relation to transcendence. He is unclear about the "reaching the transcendent" which is ascribed to cognition, to knowledge. Where and how can he achieve clarity? He could do so if the essences of this relation were somehow *given* to him, so that he could "see" it and could directly inspect the unity of cognition and its object, a unity denoted by the locution "reaching the object." He

would thereby not only know this unity to be possible, but he would have this possibility clearly before him. The possibility itself counts for him as something transcendent, as a possibility which is known but not of itself given, "seen." He obviously thinks: cognition is a thing apart from its object; cognition is given but the object of cognition is not given; and yet cognition is supposed to relate to the object, to cognize it. How can I understand this possibility? Naturally the reply is: I could understand it only if the relation itself were given as something to be "seen." As long as the object is, and remains, something transcendent, and cognition and its objects are actually separate, then indeed he can see nothing here, and his hopes for reaching a solution, perhaps even by way of falling back on transcendent presuppositions, are patent folly.

However, if he is to be consistent with these views, he should give up his starting point: he should acknowledge that in this case cognition of the transcendent is impossible, and that his pretence to know is mere prejudice. Then the problem is no longer: How is cognition of the transcendent possible? But rather, How do we account for the prejudice which ascribes a transcendent feat to cognition? And this exactly was the path Hume took.

Let us emphatically reject that approach and let us go on to illustrate the basic idea that the problem of the "how" (how cognition of the transcendent is possible and even more generally, how cognition is possible at all) can never be answered on the basis of a prior knowledge of the transcendent, of prior judgments about it, no matter whence the knowledge or the judgments are borrowed, not even if they are taken from the exact sciences. Here is an illustration: A man born deaf knows that there are sounds, that sounds produce harmonies and that a splendid art depends upon them. But he cannot understand *how* sounds do this, how musical compositions are possible. Such things he cannot *imagine*, i.e., he cannot "see" and in "seeing" grasp the "how" of such things. His knowledge about what exists helps him in no way, and it would be absurd if he were to try to deduce the *how* of music from his knowledge, thinking that thereby he could achieve clarity about the possibility of music through conclusions drawn from things of which he is cognizant. It will not do to draw conclusions from existences of which one knows but which one cannot "see." "Seeing" does not lend itself to demonstration or deduction. It is patently absurd to try to explain possibilities (and unmediated possibilities at that) by drawing logical conclusions from non-intuitive knowledge. Even if I could be wholly certain that there are transcendent worlds, even if I accept the whole content of the sciences of a natural sort, even then I cannot borrow from them. I must never fancy that by relying on transcendent presuppositions and scientific inferences I can arrive where I want to go in the critique of cognition—namely, to assess the possibility of a transcendent objectivity of cognition. And that goes not just for the

beginning but for the whole course of the critique of cognition, so long as there still remains the problem of *how cognition is possible*. And, evidently, that goes not just for the problem of transcendent objectivity but also for the elucidation of every possibility.

If we combine this with the extraordinarily strong inclination to make a transcendently oriented judgment and thus to fall into a *μετάβασις εἰς ἄλλο γένος* (a change into some other kind) in every case where a thought process involves transcendence and a judgment has to be based upon it, then we arrive at a sufficient and complete deduction of the *epistemological principle* that an epistemological *reduction* has to be accomplished in the case of every epistemological inquiry of whatever sort of cognition. That is to say, everything transcendent that is involved must be bracketed, or be assigned the index of indifference, of epistemological nullity, an index which indicates: the existence of all these transcendencies, whether I believe in them or not, is not here my concern; this is not the place to make judgments about them; they are entirely irrelevant.

All the basic errors of the theory of knowledge go hand in hand with the above mentioned *μετάβασις*, on the one hand the basic error of psychologism, on the other that of anthropologism and biologism.⁵ The *μετάβασις* is so exceedingly dangerous, partly because the proper sense of the problem is never made clear and remains totally lost in it, and partly because even those who have become clear about it find it hard to remain clear and slip easily, as their thinking proceeds, back into the temptations of the natural modes of thought and judgment as well as into the false and seductive conceptions of the problems which grow on their basis.

LECTURE III

[THE CARRYING OUT OF THE EPISTEMOLOGICAL REDUCTION: BRACKETING EVERYTHING TRANSCENDENT. THEME OF THE INVESTIGATION: THE PURE PHENOMENON. THE QUESTION OF THE "OBJECTIVE VALIDITY" OF THE ABSOLUTE PHENOMENON. THE IMPOSSIBILITY OF LIMITING OURSELVES TO SINGULAR DATA; PHENOMENOLOGICAL COGNITION AS A COGNITION OF ESSENCES. TWO SENSES OF THE CONCEPT OF THE *a priori*.]

By these considerations what the critique of cognition may and may not use has been precisely and adequately determined. What is especially puzzling for such a critique is the possibility of transcendence, but it may never under any conditions exploit for its purposes the actuality of transcendent things. Obviously the sphere of usable objects or of cognitions is limited to those which present themselves as valid, and which can remain free of the marks of epistemological vacuity; but this sphere is not empty.

5. Tr. note: Husserl's words are *Anthropologismus* and *Biologismus*, clearly coined to parallel *Psychologismus* (Psychologism).

We have indubitably secured the whole realm of *cogitationes*. The existence of the *cogitatio*, more precisely the phenomenon of cognition itself, is beyond question; and it is free from the riddle of transcendence. These existing things are already presupposed in the statement of the problem of cognition. The question as to how transcendent things come into cognition would lose its sense if cognition itself, as well as the transcendent object, were put in question. It is also clear that the *cogitationes* present a sphere of *absolutely immanent data*; it is in this sense that we understand "immanence." In the "seeing" pure phenomena the object is not outside cognition or outside "consciousness," while being given in the sense of the absolute self-givenness of something which is simply "seen."

But here we need assurance through *epistemological reduction*, the methodological essence of which we now want to examine *in concreto* for the first time. We need the reduction at this point in order to prevent the evidence of the existence of the *cogitatio* from being confused with the evidence that *my cogitatio* exists, with the evidence of the *sum cogitans*, and the like. One must guard himself from the fundamental confusion between the *pure phenomenon*, in the sense of phenomenology, and the *psychological phenomenon*, the object of empirical psychology. If I, as a human being employing my natural modes of thought, look at the perception which I am undergoing at the moment, then I immediately and almost inevitably apperceive it (that is a fact) in relation to my ego. It stands there as a mental process of this mentally living person, as his state, his act; the sensory content stands there as what is given or sensed, as that of which I am conscious; and it integrates itself with the perception of objective time. Perception, and any other *cogitatio*, so apperceived, is a *psychological fact*. Thus it is apperceived as a datum in objective time, belonging to the mentally living ego, the ego which is in the world and lasts through its duration (a duration which is measured by means of empirically calibrated timepieces). This, then, is the phenomenon which is investigated by that natural science we call "psychology."

The phenomenon in this sense falls under the principle to which we must subject ourselves in the critique of cognition, the principle of the *ἐπιστήμη*, which holds for everything transcendent. The ego as a person, as a thing in the world, and the mental life as the mental life of this person, are arranged—no matter even if quite indefinitely—on objective time; they are all transcendent and epistemologically null. Only through a reduction, the same one we have already called *phenomenological reduction*, do I attain an absolute datum which no longer presents anything transcendent. Even if I should put in question the ego and the world and the ego's mental life as such, still my simply "seeing" reflection on what is given in the apperception of the relevant mental process and on my ego, yields the *phenomenon* of this apperception; the phenomenon, so to say, of "perception construed as my perception." Of course, I can also make use of

the natural mode of reflection here, and relate this phenomenon to my ego, postulating this ego as an empirical reality through saying again: I have this phenomenon, it is mine. Then, in order to get back to the pure phenomenon, I would have to put the ego, as well as time and the world once more into question, and thereby display a pure phenomenon, the pure *cogitatio*. But while I am perceiving I can also look, by way of purely "seeing," at the perception, at it itself as it is there, and ignore its relation to the ego, or at least abstract from it. Then the perception which is thereby grasped and delimited in "seeing," is an absolutely given, pure phenomenon in the phenomenological sense, renouncing anything transcendent.

Thus to each psychic lived process there corresponds through the device of phenomenological reduction a pure phenomenon, which exhibits its intrinsic (immanent) essence (taken individually) as an absolute datum. Every postulation of a "non-immanent actuality," of anything which is not contained in the phenomenon, even if intended by the phenomenon, and which is therefore not given in the second sense, is bracketed, i.e., suspended.

If it is possible to take such phenomena for objects of investigation, then it is obvious that we are now no longer within psychology, within a natural, transcendently "objectivizing" science. Then we do not investigate and speak of psychological phenomena, of certain happenings in so-called real actuality (the existence of which remains throughout in question), but of that which exists and is valid whether there is such a thing as objective actuality or not, whether the postulation of such transcendent entities is justifiable or not. Thus at this point we speak of such absolute data; even if these data are related to objective actuality via their intentions, their intrinsic character is *within* them; nothing is assumed concerning *the existence or non-existence of actuality*. And so we have dropped anchor on the shore of phenomenology, the existence of the objects of which is assured, as the objects of a scientific investigation should be; not, however, in the manner of components of the ego or of the temporal world, but rather as absolute data grasped in purely immanent "seeing." And this pure immanence is first of all to be characterized, in our approach, through *phenomenological reduction*: I mean, not with respect to what it refers to beyond itself, but with respect to what it is in itself and to what it is given as. All this discussion is, of course, only a roundabout way of helping one to see what is to be seen in this regard, viz., the distinction between the quasi-givenness of transcendent objects and the absolute givenness of the phenomenon itself.

But we must take new steps, enter onto new considerations, so that we may gain a firm foothold in the new land and not finally run aground on its shore. For this shore has its rocks, and over it lie clouds of obscurity which threaten us with stormy gales of scepticism. What we have said up to this point holds for all phenomena, although for purposes of the critique of reason, we are, naturally, interested only in cognitive phenomena. Thus

the results set forth below can just as well be applied to all phenomena, as they hold *mutatis mutandis* for all of them.

In our quest for a critique of cognition, we have been led to a beginning, to a stronghold of data which is at our disposal, and it appears that this is what we need above all. If I am to fathom the essence of cognition, then I must, of course, possess cognition in all its questionable forms, *as a datum*, and possess it in such a way that this datum has in itself nothing of the problematic character which other cognitions bring with them, however much they seem to offer us data.

Having assured ourselves of the field of pure cognition, we can now investigate it and start a science of pure phenomena, a *phenomenology*. Is it not obvious that this must be the basis for the solution to the problems which have been agitating us? Thus it is clear that I can only attain insight into the essence of cognition if I look at it myself, and if it itself is given to me to "see," as it really is. I must study it immanently and by pure inspection within the pure phenomenon, within "pure consciousness." To be sure, its transcendence is doubtful; the existence of objects to which it is related insofar as it is transcendent, is not given to me; and questions are raised precisely as to how, in spite of this, they can be postulated, and as to what significance it has and must have if such postulation is to be possible. On the other hand, even if I raise questions about the existence and reaching the object of this relation to transcendent things, still it has something which can be grasped in the pure phenomenon. The relating-itself-to-transcendent-things, whether it is meant in this or that way, is still an inner feature of the phenomenon. It almost seems as if it would depend only on a science of absolute *cogitationes*. Since I have to cancel out any previous acceptance of the intended transcendent objects, where else could I investigate both the *meaning* of this intending-something-beyond, and also, along with this meaning, its possible *validity*, or the meaning of such validity? Where else but the place at which this meaning is unqualifiedly given and at which in the pure phenomenon of relation, corroboration, justification the meaning of validity, for its part, comes to absolute givenness.

To be sure, we are overtaken here once more by the doubt whether there is not still a surplus which must pass over into action, whether the datum of validity does not carry with it the givenness of the object, which, on the other hand, could not be the givenness of the *cogitatio*, at least insofar as there is really such a thing as valid transcendence. Nevertheless a science of absolute phenomena, understood as *cogitationes*, is the first thing we need, and this has to produce at least a major part of the solution.

Thus, it must be our aim to set up a phenomenology, more specifically a phenomenology of cognitions, construed as a theory of the essence of pure cognitive phenomena. The outlook is favorable. But how is phenomenology to proceed? How is it possible? I am supposed to make assertions, indeed objectively valid assertions; I am supposed to cognize pure

phenomena scientifically. *But does all science not lead to the establishing of objects existing in themselves, i.e., to transcendent objects?* What is scientifically established is something which is what it is in itself; it is to be accepted just as existing whether I, in my cognition, postulate it as existing or not. Does not science by its very essence have as its correlate the objectivity of that which is known only in science, and which is scientifically established? And that which is scientifically established is universally valid, is it not? But what is the situation here? We move in the field of pure phenomena. But why do I say *field*? It is more nearly a *Heracleitean flux* of phenomena. What assertions can I make about it? Now, while "seeing," I can say: this here: No doubt it is. Perhaps I can further say that this phenomenon includes that one as a part, or is connected to that one; this one spreads over that one, etc.

But obviously there is no "*objective validity*" to these assertions; they have no "*objective meaning*"; they have a merely "*subjective*" truth. Now we do not wish to become involved here in an attempt to determine whether there is not a sense in which these assertions have a certain objectivity, even while they can be pronounced "subjectively" true. But it is already clear to a fleeting glance that that higher dignity of objectivity, which the prescientific natural judgment dramatizes, so to speak, and which the considered judgments of the exact sciences bring to an incomparably higher fulfillment, is altogether lacking here. We shall not attribute any special value to such assertions—that this is here, etc.—which we make on the basis of pure "seeing."

Moreover we are reminded here of the famous Kantian distinction between *judgments of perception* and *judgments of experience*. The relationship is obvious. However, as Kant lacked the concepts of phenomenology and phenomenological reduction, and as he had not been able to completely escape psychologism and anthropologism, he did not arrive at the ultimate significance of the distinction which is necessary here. Naturally with us it is not a question of merely subjectively valid judgments which are limited in their validity to the empirical subject, or even of objective validity in the sense of validity for every subject without restriction. Indeed we have bracketed the empirical subject; and the transcendental apperception, consciousness as such, will soon acquire for us a completely different meaning, one which is not at all mysterious.

Let us now return to the main theme of our discussion. Phenomenological judgments, if restricted to singular judgments, do not have very much to teach us. But how are judgments, particularly scientifically valid judgments, to be established? And the word *scientific* immediately puts us into an embarrassing position. Does objectivity not carry *transcendence* with it, and along with this also the doubt as to what it is supposed to signify, as to *whether* and how it is possible? Through *epistemological*

reduction we exclude transcendent presuppositions, because transcendence is in question with respect to its possible validity and its meaning. But then are the scientific or transcendent conclusions of the theory of knowledge themselves still possible? Is it not obvious that before the possibility of transcendence is established no transcendent result of the theory of knowledge can itself be secure? But if, as it might seem, the epistemological *ἐπιστήμη* demands that we accept nothing transcendent until we have established its possibility, and if the establishing of the possibility of transcendence itself, as an objective result, requires transcendent postulations, then it seems that we are faced with the prospect of a circle, which makes phenomenology and the theory of knowledge impossible; and the labor of love in which we have been engaged up to this point will have been in vain.

We cannot, without more ado, despair of the possibility of a phenomenology and of what is obviously bound up with that in this discussion—a critique of cognition. What we need at this point is a further step which will unroll this spurious circle for us. We have already accomplished this in principle, for we distinguished two senses of transcendence and of immanence. After Descartes had established the evidence of the *cogitatio* (or rather of the *cogito ergo sum*, a conception which we have not adopted), he asked, as you will recall: *What is it which assures me of these fundamental data?* The answer is: the *clara et distincta perceptio*.⁶ We can carry this further. I need not claim that we already have a purer and deeper grasp of the matter than Descartes, and that thereby we grasp and understand [the concept of] evidence, the *clara et distincta perceptio*, in a more exact sense. With Descartes we can now take the further step (*mutatis mutandis*): to whatever is given through a *clara et distincta perceptio*, as each *cogitatio* is, we may accord an equal validity. To be sure, if we recall the third and fourth Meditations, the proofs of the existence of God, the appeal to the *veracitas dei*,⁷ etc., we can expect difficulties. Therefore, be very sceptical, or rather critical.

We have the givenness of the pure *cogitatio* as an absolute possession, but not the givenness of outer things in external perception, although such perception makes a claim to be giving the existence of these things. The transcendence of things requires that we put them in question. We do not understand how perception can reach transcendent objects, but we understand how perception can reach the immanent, provided it is reflective and purely immanent perception which has undergone reduction. But what enables us to understand this? Well, we directly “see,” we directly grasp what we intend in the act of “seeing” and grasping. To have a phenomenon before one’s eyes, which points to something which is not itself given in the phenomenon, and then to doubt whether such an object exists, and if so how it is to be understood that it exists—this is meaningful. But to

6. Tr. note: Clear and distinct perception.

7. Tr. note: The veracity of God.

"see" and to intend absolutely nothing more than what is grasped in "seeing," and then still to question and doubt, that is nonsense. Basically what I am saying amounts to this. The "seeing" or grasping of what is given, insofar as it is actual "seeing," actual self-givenness in the strictest sense and not another sort of givenness which points to something which is not given—that is an ultimate. That is *absolute self-evidence*; if you are looking for what is not self-evident, what is problematic, or perhaps entirely mysterious, consider the reference to something transcendent, i.e., intention, belief, even a detailed proof of something not given. And it does not help us that even here an absolute datum can be found—the givenness of intention and belief themselves. To be sure, if we only reflect we will find this before us; but what is given here is not what was intended.

But can it be that absolute self-evidence, self-givenness in "seeing," is realized only in particular mental processes and their particular abstract aspects and parts, i.e., only in the "seeing" grasp of the *here and now*? Would there not have to be a "seeing" grasp of other data as absolute data, e.g., universals, in such a way that were a universal to attain self-evident givenness within "seeing," any doubt about it would then be absurd?

How remarkable it would be to limit the *cogitatio* to phenomenologically singular data can be seen from this fact, that the whole doctrine of evidence, which we, following Descartes, have set forth, and which certainly is illuminated with absolute clarity and self-evidence, would lose its value. That is, concerning the case of a *cogitatio* which lies before us as something particular, perhaps a feeling which we are now undergoing, one might say: this is given. But we would by no means dare to put forward the most universal proposition: *the givenness of any reduced phenomenon is an absolute and indubitable givenness*.

But this is only to help you along. In any event, it is illuminating that the possibility of a critique of cognition depends on the demonstration of absolute data which are different from even the reduced *cogitationes*. To view the matter more precisely, in the subject-predicate judgments which we make concerning them, we have already gone beyond them. If we say: this phenomenon of judgment underlies this or that phenomenon of imagination, this perceptual phenomenon contains this or that aspect, color content, etc., and even if, just for the sake of argument, we make these assertions in the most exact conformity with the givenness of the *cogitatio*, then the logical forms which we employ, and which are reflected in the linguistic expressions themselves, already go beyond the mere *cogitationes*. A "something more" is involved which does not at all consist of a mere agglomeration of new *cogitationes*. And even if predication thinking gives rise to new *cogitationes*, which are joined to those concerning which we made the assertions, nevertheless they are not what constitute the predication facts which are the objective correlates of the assertions.

That cognition, which can bring to *absolute self-givenness* not only particulars, but also *universals, universal objects, and universal states of affairs*, is

more easily conceivable, at least for anyone who can assume the position of pure "seeing" and can hold all natural prejudices at arm's length. This cognition is of decisive significance for the possibility of phenomenology. For its special character consists in the fact that it is the analysis of essence and the investigation into essence in the area of pure "seeing" thought and absolute self-givenness. That is necessarily its character; it sets out to be a science and a method which will explain possibilities—possibilities of cognition and possibilities of valuation—and will explain them in terms of their fundamental essence. They are generally questionable possibilities, and investigations of them must take on the character of general investigations of essence. Analysis of essence is *eo ipso* general analysis; cognition of essence in terms of essence, in terms of essential nature, in terms of cognition which is directed to universal objects. It is here that talk of the *a priori* has its legitimate place. For what does *a priori* cognition mean except a cognition which is directed to general essences, and which entirely bases its absolute validity on essence, at least insofar as we exclude the discredited empiricist concept of the *a priori*.

In any event, although this may be the only justifiable concept of the *a priori*, another one can be found if we range under the heading of the *a priori* all concepts which as categories have a principal meaning in a certain sense, and then in addition the essential principles which are based on these concepts.

If we concentrate here on the first concept of the *a priori*, then phenomenology will have to do with the *a priori* in the sphere of origins and of absolute data, with species grasped in general "seeing," and with the *a priori* truths which these species render immediately "seeable." When we engage in the critique of reason, not only the theoretical, but also the practical and any other kind, the chief goal is certainly the *a priori* in the second sense; it is to establish the principal self-given forms and facts and, by means of this self-givenness, to develop, interpret, and evaluate the concepts which come forward with a claim to crucial significance, as well as the principles of logic, ethics, and theory of value.

LECTURE IV

[EXTENSION OF THE SPHERE OF INVESTIGATION THROUGH A CONSIDERATION OF INTENTIONALITY. THE SELF-GIVENNESS OF THE UNIVERSAL; THE PHILOSOPHICAL METHOD OF THE ANALYSIS OF ESSENCE. CRITIQUE OF THE INTERPRETATION OF EVIDENCE AS FEELINGS; EVIDENCE AS SELF-GIVENNESS. NO LIMITATION ON THE SPHERE OF GENUINE (*Reell*) IMMANENCE; THE THEME OF ALL SELF-GIVENNESS.]

If we restrict ourselves to the pure phenomenology of cognition, then we will be concerned with the *essence of cognition* as revealed in direct "seeing," i.e., with a demonstration of it which is carried out by way of

"seeing" in the sphere of phenomenological reduction and self-givenness, and with an analytical distinction between the various sorts of phenomena which are embraced by the very broad term "cognition." Then the question is as to what is essentially contained and grounded in them, from what factors they are built up, what possibilities of combination can be found while remaining purely within their essential natures, and what general interrelations flow from their essences.

And it is not merely concerned with the genuinely (*reell*) immanent, but also with what is *immanent in the intentional sense*. Cognitive mental processes (and this belongs to their essence) have an *intentio*, they refer to something, they are related in this or that way to an object. This activity of relating itself to an object belongs to them even if the object itself does not. And what is objective can appear, can have a certain kind of givenness in appearance, even though it is at the same time neither genuinely (*reell*) within the cognitive phenomenon, nor does it exist in any other way as a *cogitatio*. To explain the essence of cognition and the essential connections which belong to it and to bring this to self-givenness, this involves examining both these sides of the matter; it involves investigating this relatedness which belongs to the essence of cognition. And just here lie the puzzles, the mysteries, the problems concerning the ultimate meaning of the objectivity of cognition, including its reaching or failing to reach the object, if it is judgmental cognition and its adequacy, if it is evident cognition, etc.

In any case, the whole investigation into essence is, in fact, obviously a general investigation. The particular cognitive phenomenon, coming and going in the stream of consciousness, is not the sort of thing about which phenomenology establishes its conclusions. Phenomenology is directed to the "sources of cognition," to general origins which can be "seen," to general absolute data which present the universal basic criteria in terms of which all meaning, and also the correctness, of confused thinking is to be evaluated, and by which all the riddles which have to do with the objectivity of cognition are to be solved.

Still, are real *universality*, universal essences, and the universal states of affairs attaching to them capable of self-givenness in the same sense as a *cogitatio*? Does not the universal as such transcend knowledge? Knowledge of universals is certainly given as an absolute phenomenon; but in this we shall seek in vain for the universal which is to be identical, in the strictest sense, in the equally immanent contents of innumerable possible cases of cognition.

Of course, we answer, as we have already answered: to be sure, the universal has this kind of transcendence. Every genuine (*reell*) constituent of the cognitive phenomenon, this phenomenological particular, is also a particular; and so the universal, which certainly is no particular, cannot be really contained in the consciousness of the universal. But the objection to *this* kind of transcendence is nothing more than a prejudice, which stems

from an inappropriate interpretation of cognition, one which is not based on the source of cognition. Thus one has to get especially clear about the fact that we accord the status of absolute self-givenness to the absolute phenomenon, the *cogitatio* which has undergone reduction, not because it is a particular, but because it displays itself in pure "seeing" after phenomenological reduction, *precisely as absolute self-givenness*. But in pure "seeing" we find that universality no less displays *just* such an absolute givenness.

Is this actually the case? Let us now consider some cases in which a universal is given, i.e., cases where a purely immanent consciousness of the universal is built up on the basis of some "seen" and self-given particular. I have a particular intuition of redness, or rather several such intuitions. I stick strictly to the pure immanence; I am careful to perform the phenomenological reduction. I snip off any further significance of redness, any way in which it may be viewed as something transcendent, e.g., as the redness of a piece of blotting paper on my table, etc. And now I fully grasp in pure "seeing" the *meaning* of the concept of redness in general, redness *in specie*, the *universal* "seen" as *identical* in this and that. No longer is it the particular as such which is referred to, not this or that red thing, but redness in general. If we really did this in pure "seeing," could we then still intelligibly doubt what redness is in general, what is meant by this expression, what it may be in its very essence? We truly "see" it; there it is, the very object of our intent, this species of redness. Could a deity, an infinite intellect, do more to lay hold of the essence of redness than to "see" it as a universal?

And if now perhaps two species of redness are given to us, two shades of red, can we not judge that this and that are similar to each other, not this particular, individual phenomenon of redness, but the type, the shade as such? Is not the relation of similarity here a general absolute datum?

Again, this givenness is also something purely immanent, not immanent in the spurious sense, i.e., existing in the sphere of an individual consciousness. We are not speaking at all of the act of abstraction in the psychological subject, and of the psychological conditions under which this takes place. We are speaking of the general essence of meaning of redness and its givenness in general "seeing."

Thus it is now senseless still to raise questions and doubts as to what the essence of redness is, or what the meaning of redness is, provided that while one "sees" redness and grasps it in its specific character, one means by the word "red" just exactly that which is being grasped and "seen" there. And in the same way it is senseless, with respect to the essence of cognition and the fundamental structure of cognition, to wonder what its meaning is, provided one is immediately given the paradigmatic phenomena and the type in question in a purely "seeing" and eidetic (*ideirender*) reflection within the sphere of phenomenological reduction. However, cogni-

tion is certainly not so simple a thing as redness; a great many forms and types of it are to be distinguished. And not only that; their essential relations to one another need to be investigated. For to understand cognition we must generally clarify the *teleological interconnections* within cognition, which amount to certain essential relations of different essential types of intellectual forms. And here belongs also the ultimate explanation of the principles which, as ideal conditions of the possibility of scientific objectivity, function as norms governing the whole enterprise of empirical science. This whole attempt at the explanation of principles moves throughout in the sphere of essence, which is repeatedly built up (*konstituiert*) on the basis of particular phenomena through phenomenological reduction.

At every point this analysis is an analysis of essences and an investigation of the general states of affairs which are to be built up in immediate intuition. Thus the whole investigation is an *a priori* one, though, of course, it is not *a priori* in the sense of mathematical deductions. What distinguishes it from the "objectivizing" *a priori* sciences is its methods and its goal. *Phenomenology proceeds by "seeing," clarifying, and determining meaning, and by distinguishing meanings.* It compares, it distinguishes, it forms connections, it puts into relation, divides into parts, or distinguishes abstract aspects. But all within pure "seeing." It does not theorize or carry out mathematical operations; that is to say, it carries through no explanations in the sense of deductive theory. As it explains the basic concepts and propositions which function as principles governing the possibility of "objectivizing" science (but finally it also takes its own basic concepts and principles as objects of reflective explanation), it ends where "objectivizing" science begins. Hence it is a science in a completely different sense, and with completely different problems and methods. *The procedure of "seeing" and eidetic abstraction within the strictest phenomenological reduction is exclusively its own: it is the specifically philosophical method, insofar as this method belongs essentially to the meaning of the critique of cognition and so generally to every sort of critique of reason* (hence also evaluative and practical reason). But whatever is called philosophy in addition to the critique of reason in the strict sense, is intimately related to this: metaphysics of nature and metaphysics of all forms of mental life, and thus metaphysics in general in the widest sense.

In such cases one speaks of seeing something *evident*, and in fact those who recognize the pregnant concept of evidence and take a firm grip on the essence of such evidence have these kinds of occurrences exclusively in mind. The basic point is that one must not overlook the fact that evidence is this consciousness which is truly [a] "seeing" [consciousness] and which has a direct and adequate grasp of itself and that signifies nothing other than adequate self-givenness. The empiricist epistemologists, who speak so much about the virtues of investigating origins, and with all this remain as far from true origins as the most extreme rationalist, would

have us believe that the whole distinction between judgments that are evident and those that are not consists of a certain feeling through which the former are marked out. But what can a feeling do to give us an understanding of this matter? What is it supposed to accomplish? Is it, so to speak, supposed to call out to us: "Stop! Here is the truth?" But why then do we have to trust this call? Must this trust also carry its credentials in feeling? And why does a judgment with the meaning $2 \text{ times } 2 \text{ equals } 5$ never have this mark in feeling? and why is it impossible for it to have such a mark? Exactly how does one come to the theory that the mark of truth resides in feeling? Well, one says to oneself: "The same judgment, in the logical sense, e.g., the judgment that $2 \text{ times } 2 \text{ equals } 4$, can at one time be evident to me and at another time not; the same concept of 4 can at one time be given to me in luminous intuition (*intuitiv in Evidenz*) and at another time in a merely symbolic representation. Thus with respect to content, on both occasions we have the same phenomenon, but on the one occasion there is a feeling which marks it out and thereby lends it a superior status, a character of validity." Have I in fact the same object on both occasions, except that on one occasion a feeling is given along with it, on the other not? But if one directs his attention to the phenomenon, he will notice at once that in actuality it is not the same phenomenon which lies before him on these two occasions, but two essentially different phenomena, which have only one feature in common. If I see that $2 \text{ times } 2 \text{ equals } 4$, and then assert it in a vague symbolic assertion, in the latter case I am referring to an equality; but to refer to equality, that is not to have that phenomenon. The content of the two is different. One time I "see," and in "seeing" the interrelation itself is given; the other time I perform a symbolic reference. One time I have intuition; the other time I have an empty intention.

Thus does the distinction amount to this, that in both cases something common is present, the same "meaning," once with a feeling-label and once without? Let one attend to the phenomenon itself, instead of going beyond to talk about it and interpret it. Let us take a simpler example: if I at a certain time have redness in a living intuition and at another time think about redness in terms merely of symbols with empty intention, is it then the case that both times the same phenomenon of redness is really present, only once with a feeling and once without?

Thus one needs only to look at the phenomena in order to recognize that they are completely different, united only through what identifies them as two cases of the same thing, which we call "meaning." But if the difference is to be found in the phenomena themselves, then what need have we of feeling as a principle of distinction? And does the distinction not lie precisely in this, that in one case the self-givenness of redness lies before us, the self-givenness of number and of the general equality of number—or, subjectively expressed, the adequate "seeing" grasp and pos-

session of the entities themselves—while in the other case we have a mere reference to these things? And so we have no sympathy with this notion of feeling as evidence. It could be justified only if it were to display itself in pure “seeing,” and if pure “seeing” were to signify just that which *we* attribute to it and which contradicts it.

Thus with respect to the application of the concept of evidence, we can now say: in the existence of the *cogitatio* we find evidence, and for that reason the *cogitatio* engenders no puzzles, not even the puzzle of transcendence. We accord it the status of something unquestionable, on the basis of which we may proceed further. No less do we find evidence in the universal; we recognize that *universal objects* and *states of affairs* attain self-givenness. And they are unquestionably given in the same sense; hence they are adequately self-given in the strictest sense of the term.

Hence phenomenological reduction does not entail a limitation of the investigation to the sphere of genuine (*reell*) immanence, to the sphere of that which is genuinely contained within the absolute this of the *cogitatio*. It entails no limitation to the sphere of the *cogitatio*. Rather it entails a limitation to the sphere of things that are *purely self-given*, to the sphere of those things which are not merely spoken about, meant, or perceived, but instead to the sphere of those things that are given in just exactly the sense in which they are thought of, and moreover are self-given in the strictest sense—in such a way that nothing which is meant fails to be given. In a word, we are restricted to the sphere of pure evidence, but understanding this term in a certain strict sense, which definitely excludes any “mediate evidence,” and especially excludes all evidence in a loose sense.

Absolute givenness is an ultimate. Of course one can easily say and insist that something is absolutely given to him when it is not really the case. Again, absolute givenness can either be vaguely spoken of, or can itself be given in absolute givenness. Just as I can “see” a phenomenon of redness, and also can merely talk about it without “seeing,” so I can also either talk about the “seeing” of redness or direct my “seeing” to the “seeing” of redness, and so grasp the “seeing” of redness itself in “seeing.” On the other hand, to deny self-givenness in general is to deny every ultimate norm, every basic criterion which gives significance to cognition. But in that case one would have to construe everything as illusion, and, in a nonsensical way, also take illusion as such to be an illusion; and so one would altogether relapse into the absurdities of scepticism. However, it is obvious that the only one who can argue in this way against the sceptic is the man who “sees” the ultimate basis of knowledge, who is willing to assign a significance to “seeing,” inspecting evidence. Whoever does not see or will not see, who talks and argues, but always remains at the place where he accepts all conflicting points of view and at the same time denies them all, there is nothing we can do with him. We cannot answer: “obviously”

it is the case. For he denies that there is any such thing as "obviously." It is as if a blind man wished to deny that there is such a thing as seeing, or still better, as if one who has sight wished to deny that he himself sees and that there is any such thing as seeing. How could we convince him, assuming that he has no other mode of perception?

Thus if we hold fast to the absolute self-givenness of which we already know that it does not signify the self-givenness of genuine (*reell*) particulars, not even the absolute particulars of the *cogitatio*, then the question arises as to how far it extends and as to the extent to which, and the sense in which, it ties itself down to the sphere of *cogitationes* and the universals which are abstracted from them. If one has cast off the first and most immediate prejudice, which sees the only absolute datum in the particular *cogitatio* and in the sphere of genuinely (*reell*) immanent things, one must now also do away with the further and no less immediate prejudice, according to which newly self-given objects spring up *only* in general intuitions derived from the sphere of *cogitationes*.

"In reflective perception, the *cogitationes* are absolutely given to us in that we consciously undergo them," so one would like to begin. And then we can inspect universals which are singled out within them and within their genuinely (*reell*) abstract aspects; we can, in a "seeing" abstraction, grasp universals and the essential connections which are solely grounded in them as self-given states of affairs, constituted in "seeing"-interrelating thought. That is the end of the matter.

Meanwhile no inclination is more dangerous to the "seeing" cognition of origins and absolute data than to think too much, and from these reflections in thought to create supposed self-evident principles. Principles which for the most part are not at all explicitly formulated and hence are not subject to any critique based on "seeing" but rather implicitly determine and unjustifiably limit the direction of investigation. "*Seeing*" cognition is that form of reason which sets itself the task of converting the understanding into reason. The understanding is not to be allowed to interrupt and to insert its unredeemed bank notes among the certified ones; and its method of conversion and exchange, based on mere treasury bonds, is not questioned here.

Thus as little interpretation as possible, but as pure an intuition as possible (*intuitio sine comprehensione*). In fact, we will hark back to the speech of the mystics when they describe the intellectual seeing which is supposed not to be a discursive knowledge. And the whole trick consists in this—to give free rein to the seeing eye and to bracket the references which go beyond the "seeing" and are entangled with the seeing, along with the entities which are supposedly given and thought along with the "seeing," and, finally, to bracket what is read into them through the accompanying reflections. The crucial question is: Is the supposed object

given in the proper sense? Is it, in the strictest sense, "seen" and grasped, or does the intention go beyond that?

Supposing this to be the case, we soon recognize that it would be a *fiction* to believe that investigation by way of "seeing" moves in the sphere of a so-called *inner perception* and in the sphere of the purely immanent abstractions based on the phenomena and phenomenal aspects of inner perception. There are many sorts of objectivity and, correlatively, many sorts of so-called givenness. Perhaps the givenness of existents in the sense of the so-called "inner perception," and again the givenness of the existents in the natural, "objectivizing" sciences, is only one sort of givenness; while the others, although labeled as nonexistent, are still types of givenness. And it is only because they are, that they can be set over against the other sorts and distinguished from them in evidence.

LECTURE V

[THE CONSTITUTION (*Konstitution*) OF TIME-CONSCIOUSNESS. APPREHENSION OF ESSENCES AS AN EVIDENT GIVENNESS OF ESSENCE; THE CONSTITUTION OF THE INDIVIDUAL ESSENCE AND OF THE CONSCIOUSNESS OF UNIVERSALITY. CATEGOREAL DATA. THE SYMBOLICALLY THOUGHT AS SUCH. THE FIELD OF RESEARCH IN ITS WIDEST EXTENT: THE CONSTITUTION OF DIFFERENT MODES OF OBJECTIVITY IN COGNITION. THE PROBLEM OF THE CORRELATION OF COGNITION AND THE OBJECT OF COGNITION.]

If we have firmly established the evidence of the *cogitatio*, and then have conceded the further step of recognizing the evident givenness of the universal, this step will at once lead us further.

By perceiving color and exercising reduction on this perception I arrive at the pure phenomenon of color. And if I now achieve a pure abstraction, I will get to the essence of phenomenological color as such. But am I not equally in full possession of this essence if I have a clear image?

As far as *memory* is concerned it is not anything simple, and from the start it presents different forms of objects and, interconnected with these, different forms of givenness. Thus one could refer to the so-called *primary memory*, the *retention* which is necessarily bound up with every perception. The mental process which we are now undergoing becomes objective to us in immediate reflection, and thenceforth it displays in reflection the same objectivity: the self-same tone which has just existed as an actual "now" remains henceforth the same tone, but moving back into the past and there continually constituting the same objective point in time. And if the tone does not cease but continues, and during its continuation presents itself as the same in content or else as changing content, can we not grasp this fact—that it remains the same or changes—evidently (within certain limits)? And again, does this not mean that "seeing" *extends* beyond the strictly

present moment and hence is capable of grasping intentionally, in continually new moments, what is no longer existing, and that it is capable of becoming certain of a stretch of past time in the manner of evident givenness? And again we must distinguish, on the one hand, the pertinent object which is and was, which endures and changes and, on the other hand, the pertinent phenomenon of presentness and pastness, of duration and change, which is from time to time a "now." It is in the latter, and in the gradations it contains and the continual changes it undergoes, that *temporal existence* is brought into appearance and presented. The object is not a genuinely concrete part of the phenomenon; in its temporality it has something which cannot at all be found in the phenomenon or reduced to the phenomenon. And yet it is constituted within the phenomenon. It is presented therein and is evidently given as "existing" there.

Further, as to the givenness of essences, it is constituted not only on the basis of perception and the retention which is bound up with it, in such a way that we, so to speak, pluck a universal from the phenomenon itself; it is also constituted by *universalizing* the object of appearance, positing a universal while gazing on it, e.g., temporal content in general, duration in general, change in general. Moreover, imagination and memory can also serve as its foundation; they themselves present pure possibilities to be grasped. In a similar way we can take from these acts universals which, for their part, are not genuinely contained in these acts.

It is obvious that a fully evident grasp of essence *refers back* to some particular intuition on the basis of which it must be built up, but therefore *not necessarily to a particular perception*, which has given us the paradigm of an individual thing as something present in a genuine "now." The essence of phenomenological tone-quality, tone-intensity, of color quality, of brightness, etc., is itself given whether the eidetic abstraction carries out its operation on the basis of a *perception* or on that of a *realization in imagination*; and it is *irrelevant* to either of these whether we suppose the objects to *exist* in actuality or in some other way. The same holds for an apprehension of essences which has to do with various sorts of psychic data in the proper sense, e.g., judgment, assertion, denial, perception, inference, etc. And of course it holds also for the general states of affairs which appertain to such universals. The realization that of two tones one is lower, the other higher, and that this relation is asymmetrical, is developed within "seeing." The instances must stand before our eyes, but not necessarily in the manner of facts of perception. For a consideration of essence, perception and imagination are to be treated exactly alike; the same essence can equally well be "seen" in either, or abstracted from either, and any interpolated suppositions about existence are irrelevant. That the perceived tone together with its intensity, pitch, etc., *exists* in a certain sense, that the imagined tone, to put it bluntly, the fictitious tone, *does not exist*, that the former is obviously present in a genuine sense, the latter not,

that in the case of memory the tone is posited as having existed rather than as existing now and is only presented at this moment—all this belongs to another investigation. In a consideration of essence none of this is to the point, unless that investigation turns its attention to the presentation of just these distinctions, which also are capable of being given, and to establishing general principles concerning them.

Moreover it is quite clear that even if the underlying instances are given in perception, the actual existence which sets perceptual givenness off from other kinds has no bearing on the matter. It is not just that imagination is as suitable as perception for the consideration of essence; it is also the case that imagination appears to contain *individual data* within itself, and even actually evident data.

Let us consider *mere imagination*, even without this being fixed in memory. An imagined color is not a datum in the way a sensed color is. We distinguish the imagined color from the mental process of imagining the color. The hovering of the color before me (to put it roughly) is a “now,” a presently existing *cogitatio*, but the color itself is not a presently existing color; it is not perceived. On the other hand, it is given in a certain way, it stands before my gaze. Just like the perceived color it can be reduced through the exclusion of all transcendent significance, so that it no longer signifies for me the color of the paper, the house, etc. It is possible here too to refrain from positing the existence of anything empirical; in that case I consider it just exactly as I “see” it, or, as it were, “live” it. But in spite of that it is not a genuine part of the mental process of imagining; it is not a present, but a presented color. It stands, *as it were*, before our eyes, but not as a genuine presence. But with all this, it is “seen” and as “seen” it is, in a certain sense, given. Thus I do not take it to be a physical or psychical *existent*. Nor do I take it to be existent in the sense of a proper *cogitatio*, which is a genuine “now,” a datum which is, as a matter of evidence, characterized as given now. Still, the fact that the imagined color is not given in this or that sense does not mean that it is given in no sense. It appears and in appearing presents itself in such a way that “seeing” it itself in its presentation I can make judgments concerning the abstract aspects which constitute it and the ways in which these aspects cohere. Naturally these are also given in the same sense, and likewise they do not “actually” exist anywhere in the mental process of imagining. They are not genuinely present; they are only “represented.” The pure judgment of imagination, the mere expression of the *content*, the specific essence of that which appears, can assert: this is found in this way, contains these aspects, is changed in such and such a way—without saying anything at all about existence as really involved in objective time, about the actual present, past, and future. We could therefore say that it is concerning the *individual essence* that we make judgments and not concerning existence. Just on that account is the general judgment of essence, which

we usually just call the judgment of essence, independent of the distinction between perception and imagination. Perception posits *existence*, but it also has an *essence* which as *content* posited as existing can also be the same in representation.

But the contrast of *existence* and *essence* signifies nothing else than that here two modes of being manifest themselves in two modes of self-givenness and are to be distinguished. In merely imagining a color, the existence which attaches to that color as an actuality in time is not in question; no judgment is made concerning it, and nothing concerning it is given in the *content* of the imagination. But this color appears; it stands there; it is a "this"; it can become the subject of a judgment, and an evident judgment. Thus a mode of givenness is displayed in the intuitions in imagination and the evident judgments which are grounded on them. To be sure, if we restrict ourselves to the sphere of particular individuals, then we can hardly get started with this kind of judgment. Only if we construct general judgments of essence, can we attain the secure objectivity which science demands. But that does not matter here. Hence we seem to get into a pretty kettle of fish.

The earliest stage was the *evidence of the cogitatio*. There it seemed first of all as if we were on solid ground—*being pure and simple*. Here one would only have to grasp and "see" it. That one could, in reflecting on these data, compare and distinguish, that one could separate out the specific universals and so put forward judgments of essence, all this could be easily managed. But now it becomes clear that the pure being of the *cogitatio* reveals itself, on closer inspection, to be something which is not as simple as all that. It becomes clear that in the Cartesian sphere itself *different types* of objectivity are "constituted." And to say that they are constituted implies that immanent data are not, as it first seemed, simply in consciousness in the sense in which things are in a box, but that all the time they are displayed in something like "appearances." These appearances neither are nor genuinely contain the objects themselves. Rather in their shifting and remarkable structure they create objects in a certain way for the ego, insofar as appearances of just such a sort and just such a construction belong to that in which what we call "givenness" has been lying all along.

The *primary temporal object* is constituted in perception, along with the retention of consciousness of what is perceived; only in that sort of consciousness can time be given. Thus the universal is constituted in the *consciousness of universality* which is built up from perception and imagination. The content of intuition, in the sense of a particular *essence*, is constituted in either imagination or perception indifferently, while abstracting from existential claims. And, to remind you of this right away, from this proceed the categorial acts, which are always presupposed in any evident assertions. The categorial forms which we encounter here, which find expression in words like "is" and "not," "same" and "other," "one" and "many," "and" and "or," and in the forms of predication and attribution, etc., point

to the forms of thinking by means of which thought-forms, when they have been appropriately constructed, come to consciousness on the basis of synthetic data which tie together the simplest acts: states of affairs of this and that ontological form. It is also at this point that the "self-constitution" of the actual objects takes place in the cognitive acts which have been so formed. The consciousness in which the given object as well as the pure "seeing" of things is brought to fulfillment is, however, not like an empty box in which these data are simply lying; it is the "*seeing*" *consciousness*, which, apart from attention, consists of mental acts which are *formed in such and such ways*; and the things which are not mental acts are nevertheless constituted in these acts, and come to be given in such acts. It is only as so constituted that they display themselves as what they are.

But is this not an absolute marvel? And where does this constituting of objects begin and where does it end? Are there any actual limits to it? Isn't it true that in every representation or judgment we get at a datum in a certain sense? Isn't each object a datum, and an evident datum, just insofar as it is intuited, represented, or thought in such and such a way? In the perception of an external thing, just that thing, let us say a house standing before our eyes, is said to be perceived. The house is a transcendent thing, and forfeits its existence after the phenomenological reduction. The house-appearance, this *cognitatio*, emerging and disappearing in the stream of consciousness, is given as actually evident. In this house-phenomenon we find a phenomenon of redness, of extension, etc. These are evident data. But is it not also evident that a house appears in the house-phenomenon, and that it is just on that account that we call it a perception of a house? And what appears is not only a house in general, but just exactly this house, determined in such and such a way and appearing in that determination. Can I not make an evidently true judgment as follows: on the basis of the appearance or in the content of this perception, the house is thus and so, a brick building, with a slate roof, etc.?

And if I give free rein to fantasy, so that, e.g., perhaps I see a knight like St. George killing a dragon, is it not evident that the fantasy-phenomenon represents precisely St. George, and even St. George as described in such and such a way, and that thus it here represents something transcendent? Can I not make evident judgments here, not about the genuine content of the appearance in fantasy, but about the object which appears? To be sure, only one aspect of the object comes within the purview of this realization in imagination, although more and more aspects can be brought therein; but nevertheless it is still evident that this object, this knight St. George, lies within the meaning of the phenomenon, and is manifested there "as a datum" of a sort proper to appearance.

And finally we come to so-called *symbolic thinking*. Let us say that without any intuition I think that 2 times 2 equals 4. Can I doubt that I have directed my thought to this arithmetical proposition and that what is

thought does not concern, e.g., today's weather? If this is evidently so, is there not also something functioning as a datum here? And if we go this far, nothing can prevent us from recognizing that the paradoxical, the completely absurd, is also "given" in a certain way. A round square does not appear in imagination as a dragon killer appears to me, nor does it appear in perception as an arbitrary external thing; but an intentional object is still obviously there. I can describe the phenomenon, "thinking of a round square," in terms of its genuine content. The round square itself cannot be found there, and still it is evident that it is thought in this mental act and that in the object so thought roundness and squareness as such are thought. In other words, the object of this thought is both round and square.

Above all, it must not be said that the data to which we have finally been led in these considerations are actual data in the true sense; in that case everything perceived, imagined, pretended, or symbolically thought, every fiction and absurdity, would be "evidently given." But all that would be indicated by all this would be that *great difficulties are involved here*. It cannot hinder us in our quest for enlightenment to hold fast to the principle: *givenness extends just as far as actual evidence*. But of course the basic question will be this. In the achievement of pure evidence what is actually given in it and what is not? What is it that is produced therein only be an alien mode of thought? What interpretations are introduced without any basis in the data themselves?

And in general it is not primarily a matter of clinging to certain selected appearances as data, but rather of getting insight into the nature of givenness and of the self-constitution of different modes of objectivity. Certainly each mental phenomenon has its relation to objects; and (this is the most fundamental fact about it) each has its genuine (*reellen*) content, which is a *belief*⁸ in those aspects which compose it in the genuine sense. But on the other hand there is its intentional object, an object which it intends to constitute in such and such a way according to its essential kind.

In order to bring this matter to actual evidence, we must get everything we need from the evidence itself. Within it we must become clear as to what this "intentional inexistence" really signifies and how it is related to the genuine content of the mental phenomenon. We must see in what connections it appears as actual and proper evidence, and what in these connections actual and proper givenness is. We will then be in a position to *set forth the different modes of givenness in the proper sense, and likewise the constitution of different modes of objectivity and their relations to one another*: the givenness of the *cogitatio*, the givenness of the *cogitatio preserved in a fresh recollection*, the givenness of the *unity of appearance* enduring in the phenomenal flux, the givenness of *change* itself, the givenness of *things* to the "outer" senses, the givenness of the different forms of

8. English in the original.

imagination and memory, as well as the givenness of *perceptions* and other sorts of *representations* which unify themselves synthetically in many ways in fitting associations. Of course there is also *logical givenness*, the givenness of *universals*, of *predicates*, of *states of affairs*, etc.; also the givenness of *something absurd*, of *something contradictory*, of *something which does not exist*. In general, whether a datum manifests what is merely represented or what truly exists, what is real or what is ideal, what is possible or what is impossible, it is *a datum in the cognitive phenomenon*, in the phenomenon of a thought, in the widest sense of the term. And, *generally speaking, it is in the consideration of essences that this correlation, which seems so wonderful at first sight, is to be investigated.*

It is only in cognition that the essence of objectivity can be studied at all, with respect to all its basic forms; only in cognition is it truly given, is it evidently "seen." This *evident "seeing"* itself is truly *cognition in the fullest sense*. And the object is not a thing which is put into cognition as into a sack, as if cognition were a completely empty form, one and the same empty sack in which now this, now that is placed. But in givenness we see *that the object is constituted in cognition*, that a number of different basic forms of objectivity are to be distinguished, as well as an equal number of different forms of the given cognitive acts and of clusters and interconnections of cognitive acts. And cognitive acts, more generally any mental acts, are not isolated particulars, coming and going in the stream of consciousness without any interconnections. As they are essentially related to one another, they display a teleological *coherence* and corresponding connections of realization, corroboration, verification, and their opposites. And on these connections, which present an intelligible unity, a great deal depends. They themselves are involved in the constitution of objects. They logically bring together acts which are and acts which are not given in the proper sense, acts of mere representation (or rather of mere belief) and acts of insight. And they bring together the multiplicity of acts which are relative to this same objectivity, whether they take place in intuitive or in nonintuitive thought.

And it is in these interconnections that the objectivity involved in the objective sciences is first constituted, not in one stroke but in a gradually ascending process—and especially the objectivity of real spatio-temporal actuality.

All this is to be investigated, and investigated in the sphere of pure evidence, in order to throw light on the great problems of the nature of cognition and the meaning of the *correlation of cognition and the object of cognition*. Originally the problem concerned *the relation between subjective psychological experience and the actuality grasped therein, as it is in itself*—first of all actual reality, and then also the mathematical and other sorts of ideal realities. But first we need the insight that the *crucial problem* must rather have to do with the *relation between cognition and its object*, but in the *reduced* sense, according to which we are dealing not with human cognition,

but with cognition in general, apart from any existential assumptions either of the empirical ego or of a real world. We need the insight that the truly significant problem is that of the *ultimate bearing of cognition*, including the problem of objectivity in general, which only is what it is in correlation with possible cognition. Further, we need the insight that this problem can only be solved within the sphere of pure evidence, the sphere of data which are ultimate norms because they are absolutely given. And finally we need the realization that we must then investigate one by one, by the strict process of "seeing," all the fundamental forms of cognition and of the objects which fully or partially attain givenness within cognition, in order to determine the meaning of all the correlations which have to be explicated.

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MARTIN HEIDEGGER

1889–

Introduction

In Latin America and Europe, excluding, of course, the Soviet Union and her European satellites, one of the dominant contemporary philosophers is Heidegger. Heidegger's influence ranges widely over philosophers, theologians (including Paul Tillich), and certain psychotherapists.¹ In the English-speaking world, too, there are philosophers who regard Heidegger with as much respect as do his Continental and Latin-American admirers.

Heidegger was born in Messkirch, Germany. In his youth he received a thorough education in Thomistic philosophy. This may partially explain his philosophical preoccupation with "being," "non-being," and similar concepts.

In 1923, having served his apprenticeship at Freiburg—and solely on the strength of his lectures there—Heidegger was appointed Professor of Philosophy at Marburg, where, working at a furious pace, he wrote *Sein und Zeit*, Part I.² The original plan called for a book three times the length of Part I, but the project was never completed. In 1929, on Husserl's recommendation, Heidegger was appointed as Husserl's successor at Freiburg. He continued lecturing and publishing uninterruptedly until 1933, when, under the auspices of the Nazis, he was elected Rector of Freiburg University. In May 1933, he delivered his inaugural address, "Die Selbstbehauptung der deutschen Universität." Those familiar with the Germany of the

thirties will recognize this address for what it is: an unconditional endorsement of Nazi ideology. It is reported that Heidegger now regards this as an unfortunate episode in his career.

Heidegger believes that the term "existentialist" does not apply to his philosophy. In "Existentialism as a Humanism,"³ Sartre attempts to give a popular account of existentialism. Reacting to this essay in his letter "On Humanism," Heidegger points out that Sartre formulates the basic principle of existentialism as "existence precedes essence." This, however, is a metaphysical statement because Sartre is using the words "existence" and "essence" in the manner of traditional metaphysics, which has been saying, since Plato, that essence (*essentia*) is prior to existence (*existentia*). But, Heidegger continues, the reverse of a metaphysical statement is another metaphysical statement and, like all metaphysical statements, Sartre's principle, too, is "oblivious of the truth of Being." Heidegger grants that "existentialism" is an apt label for what Sartre represents, but not for his own position. Heidegger is interested in Being. He approaches the problem of Being through the study of *Dasein*, Heidegger's word for human existence, "the being of what we ourselves are." But existence, which uniquely belongs to *Dasein*, is not the old *existentia*. This concept is translated as *presence* in *Being and Time*. Existence is an "existential," not a "category." Existentials are the basic features of *Dasein*. Categories are features of beings (what ordinarily we might call particular existing things). Categories never apply to *Dasein*, but only to non-*Dasein* which Heidegger divides into two segments, what is *Vorhanden* (present) and what is *Zuhanden* (at hand, usable, tool). For example, *Dasein's* way of being-in is an existential. Non-*Dasein's* way of being-in is a category (see below).

Heidegger's formal philosophical training began under Rickert and Windelband. From them Heidegger assimilated three convictions. First, that a thorough understanding of the history of philosophy, beginning with the pre-Socratics, is essential for understanding what philosophy is about. Second, that the methods of inquiry and subject-matter of the natural sciences are radically distinct from those of the sciences of culture (*Geisteswissenschaften*), such as history which they defined as being the empathic understanding (*Verstehen*) of the actions and motives of men, individually and in the aggregate. Third, that philosophy is still another area of inquiry, with its own problems and methods, differing from natural science as well as from the sciences of culture. All of these convictions are reflected in Heidegger's mature work. The historical orientation is to some extent evident in his most influential work, *Sein und Zeit*, and very markedly in *An Introduction to Metaphysics*.⁴ In the latter, in the light of his own unorthodox interpretations of Greek texts, Heidegger indulges in etymological speculations about the ways in which the pre-Socratics used certain key philosophical words. Heidegger proceeds from the assumption that the wisdom of the West is locked up in the fragments of the pre-Socratics.

That philosophy is neither a natural science nor a science of culture is an overt theme in Heidegger. He identifies philosophy with "fundamental ontology." He argues that philosophy *must* begin with the study of *Dasein*, "the being of what we ourselves are." Natural science studies "ontic" features (features belonging to particular existents). Hence it is necessarily other than fundamental ontology which is the study of the nature of being, starting with

the being that *Dasein* is. Philosophy is also distinct from the science of culture. The way the latter inquire into man is quite different from the philosopher's investigations of the fundamental structure of *Dasein*. The scientist of culture wants to achieve an empathic understanding of human actions, motives, purposes, and so on. The ontologist, on the other hand, is to employ the phenomenological method, not the specialized method of *Verstehen*,⁵ and his initial task is to describe the ontology of *Dasein* or what we would call human existence. These contrasts are not merely incidental in Heidegger's philosophy. It is characteristic of his teachings that natural science and the sciences of culture must be built upon the secure foundations of fundamental ontology.

The teacher to whom Heidegger owes a great deal is Husserl. Heidegger began lecturing in Freiburg in the summer of 1915. Husserl came there as Professor of Philosophy in 1916. He had already published his *Ideas: General Introduction to Pure Phenomenology* in which the phenomenology programed in *The Idea of Phenomenology* was being worked out in more detail. This phase of Husserl's phenomenology greatly influenced Heidegger's distinctive philosophical style. However, as is usual with pupils who become masters in their own right, Heidegger eventually modified Husserl's phenomenology. Section 7 of *Being and Time* is entitled "The Phenomenological Method of Investigation." "The problem of ontology," Heidegger writes, "is to bring out into relief the being of entities, and to explain that being." He adds that the proper method for dealing with this problem is the phenomenological. The phenomenological method "is not concerned with characterizing the *what* of objects of philosophical inquiry, but rather the *how* of the inquiry itself." Husserl, as we saw earlier, identifies the objects of philosophical inquiry with intentionally inexistent essences. Accordingly, the phenomenological *method* itself has to be described in terms of objects of a single generic type. Heidegger refuses so to restrict the phenomenological method. He also differs from Husserl in that the various stages of Husserlian "reduction" are absent from Heidegger's conception of phenomenology.

In this connection we should add that some of Heidegger's sympathetic readers look upon his *positive* conception of phenomenology as "the revealing of the being of an entity, what it really *is*. This is what Heidegger is trying to do in *Sein und Zeit*, not to give formal arguments, but simply to reveal what man is, not by arguments but by relevant and penetrating descriptions of care, death, conscience, time and other basic aspects of human existence."* This suggests an interesting comparison between Heidegger and Wittgenstein. With appropriate substitutions, Professor Wild's remarks about Heidegger can be plausibly applied to Wittgenstein. For Wittgenstein the positive contribution of philosophy consists in ridding us of conceptual confusions not by the sorts of arguments we find characteristically in old-fashioned metaphysicians, for example, McTaggart, who propound theses in the manner of scientific hypotheses and think that they prove them by deductive arguments, but rather by relevant and penetrating descriptions of the place in the "language-game" of basic and troublesome concepts, for example, language, private language, meaning, mental concepts such as pain, sensation, intention, and so on. This is not to say that there are no profound differences between Heidegger's existential phenomenology

* Quoted by permission from a letter by Professor John Wild.

and Wittgenstein's "therapeutic" analyses. The differences are enormous. Heidegger's main concerns are death, care, conscience, authenticity, and man's "historicity." Wittgenstein's analyses are of pain, language, meaning, private language, and so on. In short, Heidegger's central concerns are basically related to traditionally ethical, religious, and historical interests. Wittgenstein's, on the other hand, are basically related to traditionally logical, semantical, and epistemological problems. Further, whereas Heidegger invites us to "look" at extralinguistic "entities," Wittgenstein asks that we "look" at the ways in which language does its everyday work. Notwithstanding these differences, however, Heidegger and Wittgenstein in their different ways are opposed to traditional metaphysics.

Heidegger's admirers may find it inappropriate to read him as sometimes making conceptual points (points about the logic of discourse) in support of his phenomenological "insights." However, such a way of interpreting him may at least have one merit: it may help to establish communication between the "existentialists" and the English-speaking analytic philosophers, particularly those who have learned from Wittgenstein. If it is true that the "existentialists" are impatient with conceptual analysis, it is certainly true that the analysts take that sort of analysis as the essence of philosophizing. Unless Heidegger can be read at certain places as offering conceptual analyses in support of his "descriptions"—and I think he can be so read without the slightest distortion—no analytic philosopher will be interested in his work.

It was pointed out earlier that the "transcendental-phenomenological idealism" of Husserl is a kind of subjective idealism. The ego-centered subjectivism of Husserl's "idealism" has been charged with solipsism. Husserl argues that he can escape the charge (see his "Philosophy and Anthropology"⁶). Heidegger, too, regards as central the problems concerning "the self," "the other," "the world," and their interconnections. But he offers an altogether different solution. Husserl rejects Descartes's formulation of the problem of knowledge because of its paradoxical character. But he adopts the subjectivism of the Cartesian method of doubt, and is eventually led into subjective idealism. Heidegger rejects the subjectivism itself. From his description of the necessary though not sufficient essential features of *Dasein* it is supposed to follow that both Husserl and Descartes are fundamentally confused, in spite of differences in detail. The alleged confusion common to both is that they take the subject-object (and correlative private-public) distinction to be fundamental rather than derivative. This supposedly false assumption leads them to pose as a problem the autonomous (ego-independent) existence of the "objective," "public," "external" world.

Heidegger has an argument that he regards as conclusive against anyone who thinks there is a need to prove the autonomous existence of the world, including the bodies and other minds presumed to be populating it (Descartes). It also applies to anyone who thinks, or thinks he can prove, that transcendental subjectivity is the only autonomous entity, all else being existentially dependent upon it (Husserl). The argument is also aimed at Kant whom, for all his subtleties, Heidegger regards as essentially a Cartesian. The argument is in Section 43 of *Being and Time*. It is as follows: any proof of the ego-independent reality of the external world presupposes what is to be proved. To whom are we to prove that there is an external world? This is the crucial question that is not asked,

says Heidegger. The answer must be that we are to prove it to *Dasein*, for it and nothing else is the ontological reality we normally know as a man. But it is a necessary although not sufficient feature of *Dasein* that it is in-the-world. We presuppose what we are to prove, for we are to prove to *Dasein*, which necessarily is in-the-world, that there is a world for it to be in.

The argument is valid formally. But Heidegger is mistaken in thinking that it is conclusive against the opponents he singles out. The crucial premise is: for the being of *Dasein* it is necessary though not sufficient that it be in-the-world. One may construe the first 175 pages of *Being and Time* as a detailed presentation of considerations in support of this premise and as an explanation of its meaning. The discussion is minute and presented in an idiom deliberately invented for the purpose by Heidegger. The forbidding unfamiliarity of the language and the sustained piling up of point upon point make it very hard to give an adequate summary of Heidegger's reasons for believing that his theory of man as being-in-the-world is true. All this makes the evaluation of the argument difficult, but perhaps not impossible.

In Section 12 of *Being and Time* we find the following sample of the reasoning Heidegger provides in support of his theory of *Dasein* as being-in-the-world:

Being-in, on the other hand, is a state of *Dasein*'s Being; it is an *existenziale* [Existenzial]. So one cannot think of it as the Being-present-at-hand of some corporeal Thing (such as a human body) "in" an entity which is present-at-hand. Nor does the term "Being-in" mean a spatial "in-one-another-ness" of things present-at-hand, any more than the word "in" originally signifies a spatial relationship of this kind. "In" is derived from "innan," "to reside," "habitare," "to dwell"* [sich aufhalten]. "*An*" signifies "I am accustomed," "I am familiar with," "I take care of something."† It has the signification of "*colo*" in the senses of "habito" and "diligo." The entity to which Being-in in this signification belongs is one which we have characterized in that entity which in each case I myself am [*bin*]. The expression "*bin*" is connected with "*bei*," and so "*ich bin*" ["I am"] means in its turn "I reside" or "dwell alongside" the

* Reading "inan—, wohnen" with the later editions. The earlier editions have "innan-wohnen" with the hyphen occurring misleadingly at the end of the line. As Heidegger points out in his footnote, this puzzling passage has its source in Grimm's *Kleinere Schriften*, Vol. VII, pp. 247 ff., where we find two short articles, the first entitled "IN" and the second "IN UND BEI." The first article begins by comparing a number of archaic German words meaning "domus," all having a form similar to our English "inn," which Grimm mentions. He goes on to postulate "a strong verb *innan*," which must have meant either "*habitare*," "*domi esse*," or "*recipere in domum*" (though only a weak derivative form "*innian*" is actually found), with a surviving strong preterite written either as "*an*" or as "*ann*." Grimm goes on to argue that the preposition "*in*" is derived from the verb, rather than the verb from the preposition.

† "... 'an' bedeutet: ich bin gewohnt, vertraut mit, ich pflege etwas. . . ."

In Grimm's second article he adds: "there was also an anomalous '*ann*' with the plural '*unnum*,' which expressed 'amo,' 'diligo,' 'faveo,' and to which our 'gönnen' and 'Gunst' are immediately related, as has long been recognized '*Ann*' really means 'ich bin eingewohnt,' 'pflege zu bauen'; this conceptual transition may be shown with minimal complication in the Latin '*colo*,' which stands for '*habito*' as well as '*diligo*.'"

world, as that which is familiar to me in such and such a way.* "Being [*Sein*], as the infinitive of "*ich bin*" (that is to say, when it is understood as an *existential*), signifies "to reside alongside . . .," "to be familiar with. . . ." "*Being-in*" is thus the formal existential expression for the Being of *Dasein*, which has *Being-in-the-world* as its essential state.

In these passages Heidegger is contrasting two sorts of being-in. First, there is the spatial being-in of one body in another. Then there is the being-in of a man. A man may be at home in the world; or he may be in the Army. This second way of being-in is not defined in spatial terms, although it may manifest itself ontically (from the point of view of the positive sciences) in spatial ways as well. My being in the Army, for instance, is not defined in terms of my bodily presence in a definite material object. My being in the Army may manifest itself by my bodily presence in a particular Army unit. But I may also be in the Army although I am not in uniform and am bodily absent from every particular Army unit. My being-in-the-Army is thus not essentially tied to my body's being spatially related to other bodies. The second way of being-in uniquely and necessarily belongs to *Dasein*, says Heidegger: "Being-in . . . is a state of *Dasein*'s being . . . 'Being-in' is . . . the formal existential expression for the Being of *Dasein*."

Heidegger supports the conclusion by reference to the following considerations: Only a man can dwell, reside, frequent, cultivate. Only a man can use the personal pronoun "I": any locution prefaced by "I" logically implies that the subject is a person, not a brute or an inanimate object. So that even in the case of such a word as "inhabit" and a locution such as "take care of," which can be used in sentences about brutes (Horses and cows inhabit the earth; Lions take care of their cubs), there are contexts in which these expressions characterize human activities only (I inhabit a region famous for its wines; I take care of my flowers). Moreover, "I am" is not normally a complete statement. It is normally elliptical for "I am. . . ." What is more, "I am. . . ." implies "I am alive," "I am in the world" (I am not in a void but in some sort

It is not entirely clear whether Heidegger's discussion of "an" is aimed to elucidate the preposition "*an*" (which corresponds in some of its usages to the English "*at*," and which he has just used in remarking that the water and the glass are both *at* a location), or rather to explain the termination "*an*" of "*innan*."

The reader should note that while the verb "*wohnen*" normally means "to reside" or "to dwell," the expression "*ich bin gewohnt*" means "I am accustomed to," and "*ich bin eingewohnt*" means "I have become accustomed to the place where I reside—to my surroundings." Similarly "*ich pflege etwas*" may mean either "I am accustomed to do something" or "I take care of something" or "I devote myself to it." (Grimm's "*pflege zu bauen*" presumably means "I am accustomed to putting my trust in something," "I can build on it.") The Latin "*colo*" has the parallel meanings of "I take care of something" or "cherish" it ("*diligo*") and "*I dwell*" or "*I inhabit*" ("*habito*").

* ". . . *ich wohne; halte auf bei . . . der Welt, als dem so und so Vertrauten.*" The preposition "*bei*," like "*an*," does not have quite the semantical range of any English preposition. Our "alongside," with which we shall translate it when other devices seem less satisfactory, especially in the phrase "Being alongside" ("*Sein bei*"), is often quite misleading; the sense here is closer to that of "*at*" in such expressions as "at home" or "at my father's," or that of the French "*chez*." Here again Heidegger seems to be relying upon Grimm, who proceeds to connect "*bei*" with "*bauen*" ("build") and "*bin*."

of environment). To be is to be in commerce with, to be immersed in, an environment (*Umwelt*).

These are perfectly valid logical points, *provided that the sentences in question are being employed in their ordinary sense*. In ordinary discourse, "I am in an environment" entails "There exists an environment," and this says that there exists a reality distinct from, and existentially independent of, the ego. But the Cartesian can add; "granted that in ordinary discourse the above entailments hold." The "critical" philosopher, however, wants to examine the claim that the usual implications of talk about an environment are warranted by the nature of things. The claim that there is an environment is a perceptual claim, and perceptual judgment depend upon observation. The familiar Cartesian move at this point is the dream argument. How can I know that I am not dreaming an environment? Heidegger's linguistic points so far do not show any fallacy in the dream argument. Thus, contrary to Heidegger's own estimate, *Dasein's* being-in-the-world leaves the problem of the "external world" where it was. For all we know yet, the environment implied by "I am . . ." may be identical with the contents of the Cartesian *cogitationes* which, if Descartes is right, could occur as events in a dream and, if Husserl is right, are the acts of the transcendental ego. We have as yet no proof that it is in principle impossible to begin with an isolated ego.

Let us then examine another possible line of argument to see whether the analysis of being-in-the-world has the implications Heidegger thinks it does. A defining feature of *Dasein*, says Heidegger, is Care (*Sorge*). This is neither a psychological nor an emotional state. Care is inseparable from *Dasein's* being-in-the-world. Care is *Dasein's* attentive projection of itself; to think, to desire, to plan, to wield instruments are all specific modes of care. One is tempted to attribute to Heidegger the point that all these care-ful activities and attitudes presuppose a world of objects. Otherwise there would be no way of distinguishing, as we do, wielding an instrument from imagining that we wield it or wishing that we could, or pretending that we are wielding it. But this sounds very much like a point Gilbert Ryle might make and I am reluctant to suggest that Heidegger philosophizes in the manner of Ryle (or vice versa). Moreover, even supposing that something similar to the Rylean point is here intended, the question remains as to the status of these objects. There is no doubt that Descartes recognizes that there are conceptual distinctions among waking, dreaming, pretending, and the like. And so do all subjective idealists. But there are two issues here. One concerns the manner in which the distinction is drawn among waking, dreaming, pretending, and their respective objects. In particular, once again we have to face Descartes's challenge to provide a way of distinguishing, in the first person singular, dreaming from waking. The argument under discussion does not address itself to this challenge. Nor does it prove that even if that challenge is met, the distinction between the veridical and the illusory must not be drawn as Berkeley, for instance, attempts to draw it. Why cannot the objects of human concern or care be as Berkeley conceives them to be: systematic bundles of mind-dependent "ideas"?

The second issue is the more fundamental. It has to do with the problem of "privacy" and "publicity." Wittgenstein's attack on private language relates precisely to this issue. The attack is an argument against Cartesianism. By

"Cartesianism" we mean the view that takes it for granted that first person ("subjective," "private") certainties are unproblematic. The problematic is the "public" world (and its "public" language). To render the "public" world unproblematic, we need, on this view, to reconstruct it from "private" elements. Wittgenstein's outline of the private language argument strongly suggests that he reverses the Cartesian assumption. For him the problematic is the "private"; it is the "private" that has to be explained in terms of the "public." This is the point that brings us back to Heidegger. It may be that both Descartes and Wittgenstein are wrong. They could be wrong if "private" and "public" were "polar" concepts, like "odd" and "even," which would mean that they are clear together and to the same degree. Or, it may be that they are wrong for the reason that Heidegger may be trying to get at when he proposes his theory of *Dasein* as being-in-the-world, the hyphens indicating organic unity, "ontological" inseparability. This would imply that the "private-public" dichotomy is derivative, and it is so in a manner that makes both the Cartesian and the opposing Wittgensteinian assumption philosophically irrelevant. The analytic philosopher would certainly agree that a central problem for philosophy, if not *the* central problem, is to become clear about the "private-public" distinction. Consistent with this, he would agree that insofar as Heidegger's discussion of *Dasein* as being-in-the-world relates to this issue, it is philosophically serious and central. But if there is a clear and instructive answer in Heidegger's discussion, it has yet to be discovered.

I shall conclude with a brief discussion of Heidegger's analysis of death, found in Sections 46–53 of *Being and Time* and reprinted below. Not only is this an interesting analysis of death but it also adds significant points about *Dasein's* mode of being-in-the-world. The points are that *Dasein* is possibility, and as such temporally spread out in a field, it is ahead of itself in a field, and its relation to death shows that nothingness or negativity is of the essence of *Dasein*.

Death, *Dasein's* transition to no-longer-being-there, rules out for *Dasein* the possibility of experiencing this transition and understanding it as experienced. This implies that *Dasein* can never know its own wholeness. It is never known to itself as something finished. To its very essence belongs a *not-yet*, so that *Dasein* is essentially a field of possibilities spread out in time. Moreover, *Dasein*, in correctly grasping its relation to its own death, recognizes for the first time that non-being, nothingness, is as much a part of its being as is its understanding of itself as being-in-the-world. This understanding of *Dasein's* essential involvement in nothingness is possible, says Heidegger, because anxiety (*Angst*), which is a mode of feeling, is experienced by *Dasein*. Anxiety is not the same as fear. Fear is of specific things. Anxiety has no "objects." It underlies what ontically manifests itself as neurotic anxiety, malaise or a feeling of estrangement, of not belonging. Being an ontological feature of *Dasein*, anxiety is an existential concept, not a psychological category. In anxiety, says Heidegger, *Dasein stands before* the nothingness of the possible impossibility of its existence. Being-unto-death is essentially anxiety.

Heidegger's analysis of death *assumes* that death is not what Plato and his Christian disciples took it to be: the separation of the mortal body from the immortal soul. Death is the absolute end, the absolute annihilation, the drop

into nothingness. The "world" in which being-in-the-world is possible is a world in which God has been pronounced dead. Man is thrown (*geworfen*) into the world without any purpose or meaning, and in the very act of being so thrown he is also given over to death. Neither his coming nor his going has any sense. That all this is assumed about death is evident from Heidegger's phenomenological account. He says that death rules out for *Dasein* the possibility of experiencing its own death and understanding it as experienced. Clearly, Heidegger cannot know this to be a fact on the basis of a phenomenological experience of death. What he says rules this out. What remains is a description of Heidegger's own *conception* of death, and that conception simply *assumes* the falsity of the Platonic-Christian conception. But we need an argument to the effect that the Platonic-Christian alternative is false. Otherwise we have only an unresolved dispute as to what death is.

There are familiar elements in Heidegger's conception of death, thrownness, and purposelessness. Except for the special terminology, his is essentially the view of human destiny propounded by ancient atomistic materialism and modern secularism. An example of the modern secular view is "A Free Man's Worship," an essay Bertrand Russell wrote when he was a young man. Russell agrees with Heidegger that human birth and death are purposeless from a cosmic point of view; and Russell, too, thinks of death as the absolute finish. Whereas Heidegger says that man's relation with death makes anxiety an existential feature of *Dasein*, Russell denies that anything like a feeling of anxiety in the face of the inevitability of death is either necessary or appropriate. Heidegger, on the other hand, insists that to say this sort of thing is to be "inauthentic," the implication of "inauthentic" being inappropriate to the facts themselves. But between Heidegger and Russell there is agreement as to the "facts": man is a purposeless being-unto-death. How now do we decide which of the two has the appropriate response to the "facts"—Russell who denies or Heidegger who asserts that we do, and ought to, feel anxiety in the face of death? To ask this question is to imply that Heidegger has not shown how this dispute is to be resolved.

G. N.

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3. Jean-Paul Sartre, "Existentialism as a Humanism," 1927.
4. Martin Heidegger, *An Introduction to Metaphysics*, R. Manheim (trans.), New Haven, Yale University Press, 1959.
5. For an instructive discussion of *Verstehen* and a bibliography of basic sources, see T. Abel, "The Operation called *Verstehen*," *American Journal of Sociology*, 54 (1958), reprinted in H. Feigl and M. Brodbeck (eds.), *Readings in the Philosophy of Science*, New York, Appleton, 1953.
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Dasein's Possibility of Being-a-Whole, and Being-towards-Death

by M A R T I N H E I D E G G E R

THE SEEMING IMPOSSIBILITY OF GETTING
DASEIN'S BEING-A-WHOLE INTO OUR
GRASP ONTOLOGICALLY AND
DETERMINING ITS CHARACTER

The inadequacy of the hermeneutical Situation from which the preceding analysis of Dasein has arisen, must be surmounted. It is necessary for us to bring the whole Dasein into our fore-having. We must accordingly ask whether this entity, as something existing, can ever become accessible in its Being-a-whole. In Dasein's very state of Being, there are important reasons which seem to speak against the possibility of having it presented (*Vorgabe*) in the manner required.

The possibility of this entity's Being-a-whole is manifestly inconsistent with the ontological meaning of care, and care is that which forms the totality of Dasein's structural whole. Yet the primary item in care is the "ahead-of-itself," and this means that in every case Dasein exists for the sake of itself.

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"As long as it is," right to its end, it comports itself towards its potentiality-for-Being. Even when it still exists but has nothing more "before it" and has "settled (*abgeschlossen*) its account," its Being is still determined by the "ahead-of-itself." Hopelessness, for instance, does not tear Dasein away from its possibilities, but is only one of its own modes of *Being towards* these possibilities. Even where one is without Illusions and "is ready for anything" ("*Gefasstsein auf Alles*"), here too the "ahead-of-itself" lies hidden. The "ahead-of-itself," as an item in the structure of care, tells us unambiguously that in Dasein there is always something *still outstanding*,¹ which, as a potentiality-for-Being for Dasein itself, has not yet become "actual." It is essential to the basic constitution of Dasein that there is *constantly something still to be settled* (*eine ständige Unabgeschlossenheit*). Such a lack of totality signifies that there is something still outstanding in one's potentiality-for-Being.

But as soon as Dasein "exists" in such a way that absolutely nothing more is still outstanding in it, then it has already for this very reason become "no-longer-Being-there" (*Nicht-mehr-da-sein*). Its Being is annihilated when what is still outstanding in its Being has been liquidated. As long as Dasein *is* as an entity, it has never reached its "wholeness."² But if it gains such "wholeness," this gain becomes the utter loss of Being-in-the-world. In such a case, it can never again be experienced *as an entity*.

The reason for the impossibility of experiencing Dasein ontically as a whole which is (*als seiendes Ganzes*), and therefore of determining its character ontologically in its Being-a-whole, does not lie in any imperfection of our *cognitive powers*. The hindrance lies rather in the *Being* of this entity. That which cannot ever *be such as* any experience which pretends to get Dasein in its grasp would claim, eludes in principle any possibility of getting experienced at all.³ But in that case is it not a hopeless undertaking to try to discern in Dasein its ontological totality of Being?

We cannot cross out the "ahead-of-itself" as an essential item in the structure of care. But how sound are the conclusions which we have drawn from this? Has not the impossibility of getting the whole of Dasein into our grasp been inferred by an argument which is merely formal? Or have we not at bottom inadvertently posited that Dasein is something present-at-hand,

1. ". . . im Dasein immer noch etwas *aussteht*. . . ." The verb "*ausstehen*" and the noun *Ausstand* (which we usually translate as "something still outstanding," etc.), are ordinarily used in German to apply to a debt or a bank deposit which, from the point of view of the lender or depositor, has yet to be repaid to him, liquidated, or withdrawn.

2. "Die Behebung des Seinsausstandes besagt Vernichtung seines Seins. Solange das Dasein als Seiendes *ist*, hat es seine 'Gänze' nie erreicht." The verb 'beheben' is used in the sense of closing one's account or liquidating it by withdrawing money from the bank. The noun "*Gänze*," which we shall translate as "wholeness," is to be distinguished from "*Ganze*" ("whole," or occasionally "totality") and "*Ganzheit*" ("totality").

3. "Was so gar nicht erst *sein* kann, *wie* ein Erfahren das Dasein zu erfassen präntendiert, zieht sich grundsätzlich einer Erfahrbarkeit."

ahead of which something that is not yet present-at-hand is constantly showing itself? Have we, in our argument, taken "Being-not-yet" and the "ahead" in a sense that is genuinely *existential*? Has our talk of the "end" and "totality" been phenomenally appropriate to Dasein? Has the expression "death" had a biological signification or one that is existential-ontological, or indeed any signification that has been adequately and surely delimited? Have we indeed exhausted all the possibilities for making Dasein accessible in its wholeness?

We must answer these questions before the problem of Dasein's totality can be dismissed as nugatory (*nichtiges*). This question—both the existentiell question of whether a potentiality-for-Being-a-whole is possible, and the existential question of the state-of-Being of "end" and "totality"—is one in which there lurks the task of giving a positive analysis for some phenomena of existence which up till now have been left aside. In the centre of these considerations we have the task of characterizing ontologically Dasein's Being-at-an-end and of achieving an existential conception of death. The investigations relating to these topics are divided up as follows: the possibility of experiencing the death of Others, and the possibility of getting a whole Dasein into our grasp; that which is still outstanding, the end, and totality; how the existential analysis of death is distinguished from other possible Interpretations of this phenomenon; a preliminary sketch of the existential-ontological structure of death; Being-towards-death and the everydayness of Dasein; everyday Being-towards-death, and the full existential conception of death; an existential projection of an authentic Being-towards-death.

THE POSSIBILITY OF EXPERIENCING THE DEATH OF OTHERS, AND THE POSSIBILITY OF GETTING A WHOLE DASEIN INTO OUR GRASP

When Dasein reaches its wholeness in death, it simultaneously loses the Being of its "there." By its transition to no-longer-Dasein (*Nichtmehr-dasein*), it gets lifted right out of the possibility of experiencing this transition and of understanding it as something experienced. Surely this sort of thing is denied to any particular Dasein in relation to itself. But this makes the death of Others more impressive. In this way a termination (*Beendigung*) of Dasein becomes "Objectively" accessible. Dasein can thus gain an experience of death, all the more so because Dasein is essentially Being with Others. In that case, the fact that death has been thus "Objectively" given must make possible an ontological delimitation of Dasein's totality.

Thus from the kind of Being which Dasein possesses as Being with one another, we might draw the fairly obvious information that when the Dasein of Others has come to an end, it might be chosen as a substitute

theme for our analysis of Dasein's totality. But does this lead us to our appointed goal?

Even the Dasein of Others, when it has reached its wholeness in death, is no-longer-Dasein, in the sense of Being-no-longer-in-the-world. Does not dying mean going-out-of-the-world, and losing one's Being-in-the-world? Yet when someone has died, his Being-no-longer-in-the-world (if we understand it in an extreme way) is still a Being, but in the sense of the Being-just-present-at-hand-and-no-more of a corporeal Thing which we encounter. In the dying of the Other we can experience that remarkable phenomenon of Being which may be defined as the change-over of an entity from Dasein's kind of Being (or life) to no-longer-Dasein. The *end* of the entity *qua* Dasein is the *beginning* of the same entity *qua* something present-at-hand.

However, in this way of Interpreting the change-over from Dasein to Being-just-present-at-hand-and-no-more, the phenomenal content is missed, inasmuch as in the entity which still remains we are not presented with a mere corporeal Thing. From a theoretical point of view, even the corpse which is present-at-hand is still a possible object for the student of pathological anatomy, whose understanding tends to be oriented to the idea of life. This something which is just-present-at-hand-and-no-more is "more" than a *lifeless* material Thing. In it we encounter something *unalive*, which has lost its life.⁴

But even this way of characterizing that which still remains (*des Noch-verbleibenden*) does not exhaust the full phenomenal findings with regard to Dasein.

The "deceased" (*Der "Verstorbene"*) as distinct from the dead person (*dem Gestorbenen*), has been torn away from those who have "remained behind" (*den "Hinterbliebenen"*), and is an object of "concern" in the ways of funeral rites, interment, and the cult of graves. And that is so because the deceased, in his kind of Being, is "still more" than just an item of equipment, environmentally ready-to-hand, about which one can be concerned. In tarrying alongside him in their mourning and commemoration, those who have remained behind *are with him*, in a mode of respectful solicitude. Thus the relationship-of-Being which one has towards the dead is not to be taken as a *concernful* Being-alongside something ready-to-hand.

In such Being-with the dead (*dem Toten*), the deceased *himself* is no longer factically "there." However, when we speak of "Being-with," we always have in view Being with one another in the same world. The deceased has abandoned our "world" and left it behind. But *in terms of that world* (*Aus ihr her*) those who remain can still *be with him*.

The greater the phenomenal appropriateness with which we take the no-longer-Dasein of the deceased, the more plainly is it shown that in such Being-with the dead, the authentic Being-come-to-an-end (*Zuendegekommen*-

4. "Das Nur-noch-Vorhandene ist 'mehr' als ein *lebloses* materielles Ding. Mit ihm begegnet ein des Lebens verlustig gegangenes *Unlebendiges*."

mensein) of the deceased is precisely the sort of thing which we do *not* experience. Death does indeed reveal itself as a loss, but a loss such as is experienced by those who remain. In suffering this loss, however, we have no way of access to the loss-of-Being as such which the dying man "suffers." The dying of Others is not something which we experience in a genuine sense; at most we are always just "there alongside."⁵

And even if, by thus Being there alongside, it were possible and feasible for us to make plain to ourselves "psychologically" the dying of Others, this would by no means let us grasp the way-to-be which we would then have in mind—namely, coming-to-an-end. We are asking about the ontological meaning of the dying of the person who dies, as a possibility-of-Being which belongs to *his* Being. We are not asking about the way in which the deceased has Dasein-with or is still-a-Dasein (*Nochdaseins*) with those who are left behind. If death as experienced in Others is what we are enjoined to take as the theme for our analysis of Dasein's end and totality, this cannot give us, either ontically or ontologically, what it presumes to give.

But above all, the suggestion that the dying of Others is a substitute theme for the ontological analysis of Dasein's totality and the settling of its account, rests on a presupposition which demonstrably fails altogether⁶ to recognize Dasein's kind of Being. This is what one presupposes when one is of the opinion that any Dasein may be substituted for another at random, so that what cannot be experienced in one's own Dasein is accessible in that of a stranger. But is this presupposition actually so baseless?

Indisputably, the fact that one Dasein *can be represented*⁷ by another belongs to its possibilities of Being in Being-with-one-another in the world. In everyday concern, constant and manifold use is made of such representability. Whenever we go anywhere or have anything to contribute, we can be represented by someone within the range of that "environment" with which we are most closely concerned. The great multiplicity of ways of Being-in-the-world in which one person can be represented by another, not only extends to the more refined modes of publicly being with one another, but is likewise germane to those possibilities of concern which are restricted within definite ranges, and which are cut to the measure of one's occupation, one's social status, or one's age. But the very meaning of such representation is such that it is always a representation "in" (*"in" und "bei"*) something—that is to say, in concerning oneself with something. But proximally and for

5. ". . . sind . . . 'dabei.'" Literally the verb "dabeisein" means simply "to be at that place," "to be there alongside"; but it also has other connotations which give an ironical touch to this passage, for it may also mean, "to be engaged in" some activity, "to be at it," "to be in the swim," "to be ready to be 'counted in,'"

6. ". . . eine völlige Verkenntung. . . ." The older editions have "totale" rather than "völlige."

7. "Vertretbarkeit." The verb "vertreten" means "to represent" in the sense of "deputizing" for someone. It should be noted that the verb "vorstellen" is also sometimes translated as "to represent," but in the quite different sense of "affording a 'representation' or 'idea' of something."

the most part everyday Dasein understands itself in terms of that with *which* it is customarily concerned. "One *is*" what one does. In relation to this sort of Being (the everyday manner in which we join with one another in absorption in the "world" of our concern) representability is not only quite possible but is even constitutive for our being with one another. *Here* one Dasein can and must, within certain limits, "*be*" another Dasein.

However, this possibility of representing breaks down completely if the issue is one of representing that possibility-of-Being which makes up Dasein's coming to an end, and which, as such, gives to it its wholeness. *No one can take the Other's dying away from him.* Of course someone can "go to his death for another." But that always means to sacrifice oneself for the Other "*in some definite affair.*" Such "dying for" can never signify that the Other has thus had his death taken away in even the slightest degree. Dying is something that every Dasein itself must take upon itself at the time. By its very essence, death is in every case mine, in so far as it "is" at all. And indeed death signifies a peculiar possibility-of-Being in which the very Being of one's own Dasein is an issue. In dying, it is shown that mineness and existence are ontologically constitutive for death. Dying is not an event; it is a phenomenon to be understood existentially; and it is to be understood in a distinctive sense which must be still more closely delimited.

But if "ending," as dying, is constitutive for Dasein's totality, then the Being of this wholeness itself must be conceived as an existential phenomenon of a Dasein which is in each case one's own. In "ending," and in Dasein's Being-a-whole, for which such ending is constitutive, there is, by its very essence, no representing. These are the facts of the case existentially; one fails to recognize this when one interposes the expedient of making the dying of Others a substitute theme for the analysis of totality.

So once again the attempt to make Dasein's Being-a-whole accessible in a way that is appropriate to the phenomena, has broken down. But our deliberations have not been negative in their outcome; they have been oriented by the phenomena, even if only rather roughly. We have indicated that death is an existential phenomenon. Our investigation is thus forced into a purely existential orientation to the Dasein which is in every case one's own. The only remaining possibility for the analysis of death as dying, is either to form a purely *existential* conception of this phenomenon, or else to forgo any ontological understanding of it.

When we characterized the transition from Dasein to no-longer-Dasein as Being-no-longer-in-the-world, we showed further that *Dasein's* going-out-of-the-world in the sense of dying must be distinguished from the going-out-of-the-world of that which merely has life (*des Nur-lebenden*). In our terminology the ending of anything that is alive, is denoted as "perishing" (*Verenden*). We can see the difference only if the kind of ending which Dasein can have is distinguished from the end of a life. Of course "dying"

may also be taken physiologically and biologically. But the medical concept of the "*exitus*" does not coincide with that of "perishing."

From the foregoing discussion of the ontological possibility of getting death into our grasp, it becomes clear at the same time that substructures of entities with another kind of Being (presence-at-hand or life) thrust themselves to the fore unnoticed, and threaten to bring confusion to the Interpretation of this phenomenon—even to the *first* suitable way of presenting it. We can encounter this phenomenon only by seeking, for our further analysis, an ontologically adequate way of defining the phenomena which are constitutive for it, such as "end" and "totality."

THAT WHICH IS STILL OUTSTANDING; THE END; TOTALITY

Within the framework of this investigation, our ontological characterization of the end and totality can be only provisional. To perform this task adequately, we must not only set forth the *formal* structure of end in general and of totality in general; we must likewise disentangle the structural variations which are possible for them in different realms—that is to say, de-formalized variations which have been put into relationship respectively with definite kinds of entities as "subject-matter," and which have had their character Determined in terms of the Being of these entities. This task, in turn, presupposes that a sufficiently unequivocal and positive Interpretation shall have been given for the kinds of Being which require that the aggregate of entities be divided into such realms. But if we are to understand these ways of Being, we need a clarified idea of Being in general. The task of carrying out in an appropriate way the ontological analysis of end and totality breaks down not only because the theme is so far-reaching, but because there is a difficulty in principle: to master this task successfully, we must presuppose that precisely what we are seeking in this investigation—the meaning of Being in general—is something which we have found already and with which we are quite familiar.

In the following considerations, the "variations" in which we are chiefly interested are those of end and totality; these are ways in which Dasein gets a definite character ontologically, and as such they should lead to a primordial Interpretation of this entity. Keeping constantly in view the existential constitution of Dasein already set forth, we must try to decide how inappropriate to Dasein ontologically are those conceptions of end and totality which first thrust themselves to the fore, no matter how categorically indefinite they may remain. The rejection (*Zurückweisung*) of such concepts must be developed into a positive *assignment* (*Zuweisung*) of them to their specific realms. In this way our understanding of end and totality in their variant forms as *existentialia* will be strengthened, and this will guarantee the possibility of an ontological Interpretation of death.

But even if the analysis of Dasein's end and totality takes on so broad an orientation, this cannot mean that the existential concepts of end and totality are to be obtained by way of a deduction. On the contrary, the existential meaning of Dasein's coming-to-and-end must be taken from Dasein itself, and we must show how such "ending" can constitute *Being-a-whole* for the entity which *exists*.

We may formulate in three theses the discussion of death up to this point: 1. there belongs to Dasein, as long as it is, a "not-yet" which it will be—that which is constantly outstanding; 2. the coming-to-its-end of what-is-not-yet-at-an-end (in which what is still outstanding is liquidated as regards its Being) has the character of no-longer-Dasein; 3. coming-to-an-end implies a mode of Being in which the particular Dasein simply cannot be represented by someone else.

In Dasein there is undeniably a constant "lack of totality" which finds an end with death. This "not-yet" "belongs" to Dasein as long as it is; this is how things stand phenomenally. Is this to be Interpreted as *still outstanding*?⁸ With relation to what entities do we talk about that which is still outstanding? When we use this expression we have in view that which indeed "belongs" to an entity, but is still missing. Outstanding, as a way of being missing, is grounded upon a belonging-to.⁹ For instance, the remainder yet to be received when a debt is to be balanced off, is still outstanding. That which is still outstanding is not yet at one's disposal. When the "debt" gets paid off, that which is still outstanding gets liquidated; this signifies that the money "comes in," or, in other words, that the remainder comes successively along. By this procedure the "not-yet" gets filled up, as it were, until the sum that is owed is "all together."¹⁰ Therefore, to be still outstanding means that what belongs together is not yet all together. Ontologically, this implies the un-readiness-to-hand of those portions which have yet to be contributed. These portions have the same kind of Being as those which are ready-to-hand already; and the latter, for their part, do not have their kind of Being modified by having the remainder come in. Whatever "lack-of-togetherness" remains (*Das bestehende Unzusammen*) gets "paid off" by a cumulative piecing-together. *Entities for which anything is still outstanding have the kind of Being of something ready-to-hand.* The togetherness (*Das Zusammen*) is characterized as a "sum," and so is that lack-of-togetherness which is founded upon it.

But this lack-of-togetherness which belongs to such a mode of togetherness—this being-missing as still-outstanding—cannot by any means define ontologically that "not-yet" which belongs to Dasein as its possible death.

8. "Aber darf der phänomenale Tatbestand, dass zum Dasein, solange es ist, dieses Noch-nicht 'gehört,' als *Ausstand* interpretiert werden?" The contrast between "Tatbestand" and "Ausstand" is perhaps intentional.

9. "Ausstehen als Fehlen gründet in einer Zugehörigkeit."

10. "Tilgung der 'Schuld' als Behebung des Ausstandes bedeutet das 'Eingehen,' das ist Nacheinanderankommen des Restes, wodurch das Noch-nicht gleichsam aufgefüllt wird, bis die geschuldete Summe 'beisammen' ist."

Dasein does not have at all the kind of Being of something ready-to-hand-within-the-world. The togetherness of an entity of the kind which Dasein is "in running its course" until that "course" has been completed, is not constituted by a "continuing" piecing-on of entities which somehow and somewhere, are ready-to-hand already in their own right.¹¹

That Dasein should *be* together only when its "not-yet" has been filled up is so far from the case that it is precisely then that Dasein is no longer. Any Dasein always exists in just such a manner that its "not-yet" *belongs* to it. But are there not entities which are as they are and to which a "not-yet" can belong, but which do not necessarily have Dasein's kind of Being?

For instance, we can say, "The last quarter is still outstanding until the moon gets full." The "not-yet" diminishes as the concealing shadow disappears. But here the moon is always present-at-hand as a whole already. Leaving aside the fact that we can never get the moon *wholly* in our grasp even when it is full, this "not-yet" does not in any way signify a not-yet-*Being-together* of the parts which belongs to the moon, but pertains only to the way we *get it in our grasp* perceptually. The "not-yet" which belongs to Dasein, however, is not just something which is provisionally and occasionally inaccessible to one's own experience or even to that of a stranger; it "is" not yet "actual" at all. Our problem does not pertain to *getting into our grasp* the "not-yet" which is of the character of Dasein; it pertains to the possible *Being or not-Being* of this "not-yet." Dasein must, as itself, *become*—that is to say, *be*—what it is not yet. Thus if we are to be able, by comparison, to define that *Being of the "not-yet" which is of the character of Dasein*, we must take into consideration entities to whose kind of Being becoming belongs.

When, for instance, a fruit is unripe, it "goes towards" its ripeness. In this process of ripening, that which the fruit is not yet, is by no means pieced on as something not yet present-at-hand. The fruit brings itself to ripeness, and such a bringing of itself is a characteristic of its Being as a fruit. Nothing imaginable which one might contribute to it, would eliminate the unripeness of the fruit, if this entity did not come to ripen *of its own accord*. When we speak of the "not-yet" of the unripeness, we do not have in view something else which stands outside (*aussenstehendes*), and which—with utter indifference to the fruit—might be present-at-hand in it and with it. What we have in view is the fruit itself in its specific kind of Being. The sum which is not yet complete is, as something ready-to-hand, "a matter of indifference" as regards the remainder which is lacking and un-ready-to-hand, though, taken strictly, it can neither be indifferent to that remainder

11. Throughout this sentence Heidegger uses words derived from the verb "laufen," "to run." Thus, "in running its course" represents "*in seinem Verlauf*," "its course" has been completed" represents "*es 'seinem Lauf' vollendet hat*"; "continuing" represents "*fortlaufende*."

nor not be indifferent to it.¹² The ripening fruit, however, not only is not indifferent to its unripeness as something other than itself, but it is that unripeness as it ripens. The "not-yet" has already been included in the very Being of the fruit, not as some random characteristic, but as something constitutive. Correspondingly, as long as any Dasein is, it too *is already its "not-yet."*

That which makes up the "lack of totality" in Dasein, the constant "ahead-of-itself," is neither something still outstanding in a summative togetherness, nor something which has not yet become accessible. It is a "not-yet" which any Dasein, as the entity which it is, has to be. Nevertheless, the comparison with the unripeness of the fruit shows essential differences, although there is a certain agreement. If we take note of these differences, we shall recognize how indefinite our talk about the end and ending has hitherto been.

Ripening is the specific Being of the fruit. It is also a kind of Being of the "not-yet" (of unripeness); and, as such a kind of Being, it is formally analogous to Dasein, in that the latter, like the former, *is* in every case already its "not-yet" in a sense still to be defined. But even then, this does not signify that ripeness as an "end" and death as an "end" coincide with regard to their ontological structure as ends. With ripeness, the fruit *fulfils* itself.¹³ But is the death at which Dasein arrives, a fulfillment in this sense? With its death, Dasein has indeed "fulfilled its course." But in doing so, has it necessarily exhausted its specific possibilities? Rather, are not these precisely what gets taken away from Dasein? Even "unfulfilled" Dasein ends. On the other hand, so little is it the case that Dasein comes to its ripeness only with death, that Dasein may well have passed its ripeness before the end.¹⁴ For the most part, Dasein ends in unfulfilment, or else by having disintegrated and been used up.

Ending does not necessarily mean fulfilling oneself. It thus becomes more urgent to ask *in what sense, if any, death must be conceived as the ending of Dasein.*

In the first instance, "ending" signifies "*stopping*," and it signifies this in senses which are ontologically different. The rain stops. It is no longer present-at-hand. The road stops. Such an ending does not make the road disappear, but such a stopping is determinative for the road as this one, which is present-at-hand. Hence ending, as stopping, can signify either

12. "Die noch nicht volle Summe ist als Zuhandenes gegen den fehlenden unzuhandenen Rest 'gleichgültig.' Streng genommen kann sie weder ungleichgültig, noch gleichgültig dagegen sein."

13. "Mit der Reife *vollendet* sich die Frucht." Notice that the verb "*vollenden*," which we here translate as "*fulfil*," involves the verb "*enden*" ("to end"). While "*vollenden*" may mean "to bring fully to an end" or "to terminate," it may also mean "to complete" or "to perfect."

14. While we have translated "Reife" by its cognate "ripeness," this word applies generally to almost any kind of maturity, even that of Dasein—not merely the maturity of fruits and vegetables.

"passing over into non-presence-at-hand" or else "Being-present-at-hand only when the end comes." The latter kind of ending, in turn, may either be determinative for something which is present-at-hand *in an unfinished way*, as a road breaks off when one finds it under construction; or it may rather constitute the "finishedness" of something present-at-hand, as the painting is finished with the last stroke of the brush.

But ending as "getting finished" does not include fulfilling. On the other hand, whatever has got to be fulfilled must indeed reach the finishedness that is possible for it. Fulfilling is a mode of "finishedness," and is founded upon it. Finishedness is itself possible only as a determinate form of something present-at-hand or ready-to-hand.

Even ending in the sense of "disappearing" can still have its modifications according to the kind of Being which an entity may have. The rain is at an end—that is to say it has disappeared. The bread is at an end—that is to say, it has been used up and is no longer available as something ready-to-hand.

By none of these modes of ending can death be suitably characterized as the "end" of Dasein. If dying, as Being-at-an-end, were understood in the sense of an ending of the kind we have discussed, then Dasein would thereby be treated as something present-at-hand or ready-to-hand. In death, Dasein has not been fulfilled nor has it simply disappeared; it has not become finished nor is it wholly at one's disposal as something ready-to-hand.

On the contrary, just as Dasein *is* already its "not-yet," and is its "not-yet" constantly as long as it is, it *is* already its end too. The "ending" which we have in view when we speak of death, does not signify Dasein's Being-at-an-end (*Zu-Ende-sein*), but a *Being-towards-the-end* (*Sein zum Ende*) of this entity. Death is a way to be, which Dasein takes over as soon as it is. "As soon as man comes to life, he is at once old enough to die."

Ending, as Being-towards-the-end, must be clarified ontologically in terms of Dasein's kind of Being. And presumably the possibility of an existent Being of that "not-yet" which lies "before" the "end,"¹⁵ will become intelligible only if the character of ending has been determined existentially. The existential clarification of Being-towards-the-end will also give us for the first time an adequate basis for defining what can possibly be the meaning of our talk about a totality of Dasein, if indeed this totality is to be constituted by death as the "end."

Our attempt to understand Dasein's totality by taking as our point of departure a clarification of the "not-yet" and going on to a characterization of "ending," has not led us to our goal. It has shown only *in a negative way* that the "not-yet" which Dasein in every case *is*, resists Interpretation as something still outstanding. The end *towards* which Dasein *is* as existing, remains inappropriately defined by the notion of a "Being-at-an-

15. ". . . die Möglichkeit eines existierenden Seins des Noch-nicht, das 'vor' dem 'Ende' liegt. . . ." The earlier editions have ". . . das ja 'vor' dem 'Ende.' . . ."

end." These considerations, however, should at the same time make it plain that they must be turned back in their course. A positive characterization of the phenomena in question (Being-not-yet, ending, totality) succeeds only when it is unequivocally oriented to Dasein's state of Being. But if we have any insight into the realms where those end-structures and totality-structures which are to be construed ontologically with Dasein belong, this will, in a negative way, make this unequivocal character secure against wrong turnings.

If we are to carry out a positive Interpretation of death and its character as an end, by way of existential analysis, we must take as our clue the basic state of Dasein at which we have already arrived—the phenomenon of care.

HOW THE EXISTENTIAL ANALYSIS OF DEATH IS DISTINGUISHED FROM OTHER POSSIBLE INTERPRETATIONS OF THIS PHENOMENON

The unequivocal character of our ontological Interpretation of death must first be strengthened by our bringing explicitly to mind what such an Interpretation can *not* inquire about, and what it would be vain to expect it to give us any information or instructions about.¹⁶

Death, in the widest sense, is a phenomenon of life. Life must be understood as a kind of Being to which there belongs a Being-in-the-world. Only if this kind of Being is oriented in a privative way to Dasein, can we fix its character ontologically. Even Dasein may be considered purely as life. When the question is formulated from the viewpoint of biology and physiology, Dasein moves into that domain of Being which we know as the word of animals and plants. In this field, we can obtain data and statistics about the longevity of plants, animals and men, and we do this by ascertaining them ontically. Connections between longevity, propagation, and growth may be recognized. The "kinds" of death, the causes, "contrivances" and ways in which it makes its entry, can be explored.

Underlying this biological-ontical exploration of death is a problematic that is ontological. We still have to ask how the ontological essence of death is defined in terms of that of life. In a certain way, this has always been decided already in the ontical investigation of death. Such investigations operate with preliminary conceptions of life and death, which have been more or less clarified. These preliminary conceptions need to be

16. ". . . wonach diese *nicht* fragen, und worüber eine Auskunft und Anweisung von ihr vergeblich erwartet werden kann." The older editions have "kann" after "fragen," and "muss" where the newer editions have "kann."

sketched out by the ontology of Dasein. Within the ontology of Dasein, which is *superordinate* to an ontology of life, the existential analysis of death is, in turn, *subordinate* to a characterization of Dasein's basic state. The ending of that which lives we have called "perishing." Dasein too "has" its death, of the kind appropriate to anything that lives; and it has it, not in ontical isolation, but as codetermined by its primordial kind of Being. In so far as this is the case, Dasein too can end without authentically dying, though on the other hand, *qua* Dasein, it does not simply perish. We designate this intermediate phenomenon as its "*demise*."¹⁷ Let the term "*dying*" stand for that *way of Being* in which Dasein *is towards* its death.¹⁸ Accordingly we must say that Dasein never perishes. Dasein, however, can demise only as long as it is dying. Medical and biological investigation into "demising" can obtain results which may even become significant ontologically if the basic orientation for an existential Interpretation of death has been made secure. Or must sickness and death in general—even from a medical point of view—be primarily conceived as existential phenomena?

The existential Interpretation of death takes precedence over any biology and ontology of life. But it is also the foundation for any investigation of death which is biographical or historiological, ethnological or psychological. In any "typology" of "dying," as a characterization of the conditions under which a demise is "Experienced" and of the ways in which it is "Experienced," the concept of death is already presupposed. Moreover, a psychology of "dying" gives information about the "living" of the person who is "dying," rather than about dying itself. This simply reflects the fact that when Dasein dies—and even when it dies authentically—it does not have to do so with an Experience of its factual demising, or in such an Experience. Likewise the ways in which death is taken among primitive peoples, and their ways of comporting themselves towards it in magic and cult, illuminate primarily the understanding of *Dasein*; but the Interpretation of this understanding already requires an existential analytic and a corresponding conception of death.

On the other hand, in the ontological analysis of Being-towards-the-end there is no anticipation of our taking any existential stand towards death. If "death" is defined as the "end" of Dasein—that is to say, of Being-in-the-world—this does not imply any ontical decision whether "after death" still another Being is possible, either higher or lower, or whether Dasein "lives on" or even "outlasts" itself and is "immortal." Nor is anything decided ontically about the "other-worldly" and its possibility, any more than

17. "*Ableben*." This term, which literally means something like "living out" one's life, is used in ordinary German as a rather legalistic term for a person's death. We shall translate it as "demise" (both as a noun and as a verb), which also has legalistic connotations. But this translation is an arbitrary one, and does not adequately express the meaning which Heidegger is explaining.

18. "... *Seinsweise*, in der das Dasein *zu* seinem Tode *ist*."

about the "this-worldly";¹⁹ it is not as if norms and rules for comporting oneself towards death were to be proposed for "edification." But our analysis of death remains purely "this-worldly" in so far as it interprets that phenomenon merely in the way in which it *enters into* any particular Dasein as a possibility of its Being. Only when death is conceived in its full ontological essence can we have any methodological assurance in even *asking* what *may be after death*; only then can we do so with meaning and justification. Whether such a question is a possible *theoretical* question at all will not be decided here. The this-worldly ontological interpretation of death takes precedence over any ontical other-worldly speculation.

Finally, what might be discussed under the topic of a "metaphysic of death" lies outside the domain of an existential analysis of death. Questions of how and when death "came into the world," what "meaning" it can have and is to have as an evil and affliction in the aggregate of entities—these are questions which necessarily presuppose an understanding not only of the character of Being which belongs to death, but of the ontology of the aggregate of entities as a whole, and especially of the ontological clarification of evil and negativity in general.

Methodologically, the existential analysis is superordinate to the questions of a biology, psychology, theodicy, or theology of death. Taken ontically, the results of the analysis show the peculiar *formality* and emptiness of any ontological characterization. However, that must not blind us to the rich and complicated structure of the phenomenon. If Dasein in general never becomes accessible as something present-at-hand, because Being-possible belongs in its own way to Dasein's kind of Being, even less may we expect that we can simply read off the ontological structure of death, if death is indeed a distinctive possibility of Dasein.

On the other hand, the analysis cannot keep clinging to an idea of death which has been devised accidentally and at random. We can restrain this arbitrariness only by giving beforehand an ontological characterization of the kind of Being in which the "end" enters into Dasein's average everydayness. To do so, we must fully envisage those structures of everydayness which we have earlier set forth. The fact that in an existential analysis of death, existentiell possibilities of Being-towards-death are consonant with it, is implied by the essence of all ontological investigation. All the more explicitly must the existential definition of concepts be unaccompanied by any existentiell commitments,²⁰ especially with relation to death, in which Dasein's character as possibility lets itself be revealed most precisely. The existential problematic aims only at setting forth the ontological structure of Dasein's Being-towards-the-end.

19. "Über das 'Jenseits' und sein Möglichkeit wird ebensowenig ontisch entschieden wie über das 'Diesseits.' . . ." The quotation marks around "Diesseits" appear only in the later editions.

20. "Um so ausdrücklicher muss mit der existenzialen Begriffsbestimmung die existenzielle Unverbindlichkeit zusammengehen. . . ."

PRELIMINARY SKETCH OF THE EXISTENTIAL-ONTOLOGICAL STRUCTURE OF DEATH

From our considerations of totality, end, and that which is still outstanding, there has emerged the necessity of Interpreting the phenomenon of death as Being-towards-the-end, and of doing so in terms of Dasein's basic state. Only so can it be made plain to what extent Being-a-whole, as constituted by Being towards-the-end, is possible in Dasein itself in conformity with the structure of its Being. We have seen that care is the basic state of Dasein. The ontological signification of the expression "care" has been expressed in the "definition": "ahead-of-itself-Being-already-in (the world) as Being-alongside entities which we encounter (within-the-world)." In this are expressed the fundamental characteristics of Dasein's Being: existence, in the "ahead-of-itself"; facticity, in the "Being-already-in"; falling, in the "Being-alongside." If indeed death belongs in a distinctive sense to the Being of Dasein, then death (or Being-towards-the-end) must be defined in terms of these characteristics.

We must, in the first instance, make plain in a preliminary sketch how Dasein's existence, facticity, and falling reveal themselves in the phenomenon of death.

The Interpretation in which the "not-yet—and with it even the uttermost "not-yet," the end of Dasein—was taken in the sense of something still outstanding, has been rejected as inappropriate in that it included the ontological perversion of making Dasein something present-at-hand. Being-at-an-end implies existentially Being-towards-the-end. The uttermost "not-yet" has the character of something *towards which* Dasein *comports itself*. The end is impending (*steht . . . bevor*) for Dasein. Death is not something not yet present-at-hand, nor is it that which is ultimately still outstanding but which has been reduced to a minimum. *Death is something that stands before us—something impending.*²¹

However, there is much that can impend for Dasein as Being-in-the-world. The character of impendence is not distinctive of death. On the contrary, this Interpretation could even lead us to suppose that death must be understood in the sense of some impending event encountered environmentally. For instance, a storm, the remodelling of the house, or the arrival of a friend, may be impending; and these are entities which are respectively

21. ". . . sondern eher ein *Bevorstand*." While we shall ordinarily use various forms of "impend" to translate "Bevorstand," "bevorstehen," etc., one must bear in mind that the literal meaning of these expressions is one of "standing before," so that they may be quite plausibly contrasted with "Ausstehen," etc. ("standing out"). Thus we shall occasionally use forms of "stand before" when this connotation seems to be dominant.

present-at-hand, ready-to-hand, and there-with us. The death which impends does not have this kind of Being.

But there may also be impending for Dasein a journey, for instance, or a disputation with Others, or the forgoing of something of a kind which Dasein itself can be—its own possibilities of Being, which are based on its Being with Others.

Death is a possibility-of-Being which Dasein itself has to take over in every case. With death, Dasein stands before itself in its ownmost potentiality-for-Being. This is a possibility in which the issue is nothing less than Dasein's Being-in-the-world. Its death is the possibility of no-longer being-able-to-be-there.²² If Dasein stands before itself as this possibility, it has been *fully* assigned to its ownmost potentiality-for-Being. When it stands before itself in this way, all its relations to any other Dasein have been undone.²³ This ownmost non-relational²⁴ possibility is at the same time the uttermost one.

As potentiality-for-Being, Dasein cannot outstrip the possibility of death. Death is the possibility of the absolute impossibility of Dasein. Thus death reveals itself as that *possibility which is one's ownmost, which is non-relational, and which is not to be outstripped (unüberholbare)*. As such, death is something *distinctively* impending. Its existential possibility is based on the fact that Dasein is essentially disclosed to itself, and disclosed, indeed, as ahead-of-itself. This item in the structure of care has its most primordial concretion in Being-towards-death. As a phenomenon, Being-towards-the-end becomes plainer as Being towards that distinctive possibility of Dasein which we have characterized.

This ownmost possibility, however, non-relational and not to be outstripped, is not one which Dasein procures for itself subsequently and occasionally in the course of its Being. On the contrary, if Dasein exists, it has already been *thrown* into this possibility. Dasein does not, proximally and for the most part, have any explicit or even any theoretical knowledge of the fact that it has been delivered over to its death, and that death thus belongs to Being-in-the-world. Thrownness into death reveals itself to Dasein in a more primordial and impressive manner in that state-of-mind which we have called "anxiety." Anxiety in the face of death is anxiety "in the face of" that potentiality-for-Being which is one's ownmost, non-relational, and not to be outstripped. That in the face of which one has anxiety is Being-in-the-world itself. That about which one has this anxiety

22. "Nicht-mehr-dasein-könnens." Notice that the expressions "Seinkönnen" (our "potentiality-for-Being") and "Nichtmehrdasein" (our "no-longer-Dasein") are here fused.

23. "So sich bevorstehend sind in ihm alle Bezüge zu anderem Dasein gelöst."

24. "unbezügliche." This term appears frequently throughout the chapter, and, as the present passage makes clear, indicates that in death Dasein is cut off from relations with others. The term has accordingly been translated as "non-relational," in the sense of "devoid of relationships."

is simply Dasein's potentiality-for-Being. Anxiety in the face of death must not be confused with fear in the face of one's demise. This anxiety is not an accidental or random mood of "weakness" in some individual; but, as a basic state-of-mind of Dasein, it amounts to the disclosedness of the fact that Dasein exists as thrown Being *towards* its end. Thus the existential conception of "dying" is made clear as thrown Being towards its ownmost potentiality-for-Being, which is non-relational and not to be outstripped. Precision is gained by distinguishing this from pure disappearance, and also from merely perishing, and finally from the "Experiencing" of a demise.²⁵

Being-towards-the-end does not first arise through some attitude which occasionally emerges, nor does it arise as such an attitude; it belongs essentially to Dasein's thrownness, which reveals itself in a state-of-mind (mood) in one way or another. The factual "knowledge" or "ignorance" which prevails in any Dasein as to its ownmost Being-towards-the-end, is only the expression of the existentiell possibility that there are different ways of maintaining oneself in this Being. Factically, there are many who, proximally and for the most part, do not know about death; but this must not be passed off as a ground for proving that Being-towards-death does not belong to Dasein "universally." It only proves that proximally and for the most part Dasein covers up its ownmost Being-towards-death, fleeing *in the face* of it. Factically, Dasein is dying as long as it exists, but proximally and for the most part, it does so by way of *falling*. For factual existing is not only generally and without further differentiation a thrown potentiality-for-Being-in-the-world, but it has always likewise been absorbed in the "world" of its concern. In this falling Being-alongside, fleeing from uncanniness announces itself; and this means now, a fleeing in the face of one's ownmost Being-towards-death. Existence, facticity, and falling characterize Being-towards-the-end, and are therefore constitutive for the existential conception of death. *As regards its ontological possibility, dying is grounded in care.*

But if Being-towards-death belongs primordially and essentially to Dasein's Being, then it must also be exhibitable in everydayness, even if proximally in a way which is inauthentic.²⁶ And if Being-towards-the-end should afford the existential possibility of an existentiell Being-a-whole for Dasein, then this would give phenomenal confirmation for the thesis that "care" is the ontological term for the totality of Dasein's structural whole. If, however, we are to provide a full phenomenal justification for this principle, a *preliminary sketch* of the connection between Being-towards-death and care is not sufficient. We must be able to see this connection above all in that concretion which lies closest to Dasein—its everydayness.

25. "... gegen ein 'Erleben' des Ablebens."

26. "... dann muss es auch—wenngleich zunächst uneigentlich—in der Alltäglichkeit aufweisbar sein." The earlier editions have another "auch" just before "in der Alltäglichkeit."

BEING-TOWARDS-DEATH AND THE EVERYDAYNESS OF DASEIN

In setting forth average everyday Being-towards-death, we must take our orientation from those structures of everydayness at which we have earlier arrived. In Being-towards-death, Dasein comports itself *towards itself* as a distinctive potentiality-for-Being. But the Self of everydayness is the "they." The "they" is constituted by the way things have been publicly interpreted, which expresses itself in idle talk.²⁷ Idle talk must accordingly make manifest the way in which everyday Dasein interprets for itself its Being-towards-death. The foundation of any interpretation is an act of understanding, which is always accompanied by a state-of-mind, or, in other words, which has a mood. So we must ask how Being-towards-death is disclosed by the kind of understanding which, with its state-of-mind, lurks in the idle talk of the "they." How does the "they" comport itself understandingly towards that ownmost possibility of Dasein, which is non-relational and is not to be outstripped? What state-of-mind discloses to the "they" that it has been delivered over to death, and in what way?

In the publicness with which we are with one another in our everyday manner, death is "known" as a mishap which is constantly occurring—as a "case of death."²⁸ Someone or other "dies," be he neighbour or stranger (*Nächste oder Fernerstehende*). People who are no acquaintances of ours are "dying" daily and hourly. "Death" is encountered as a well-known event occurring within-the-world. As such it remains in the inconspicuousness characteristic of what is encountered in an everyday fashion. The "they" has already stowed away (*gesichert*) an interpretation for this event. It talks of it in a "fugitive" manner, either expressly or else in a way which is mostly inhibited, as if to say, "One of these days one will die too, in the end; but right now it has nothing to do with us."²⁹

The analysis of the phrase "one dies" reveals unambiguously the kind of Being which belongs to everyday Being-towards-death. In such a way of talking, death is understood as an indefinite something which, above all, must duly arrive from somewhere or other, but which is proximally *not yet present-at-hand* for oneself, and is therefore no threat. The expression "one dies" spreads abroad the opinion that what gets reached, as it were, by death, is the "they." In Dasein's public way of interpreting, it is said that "one dies," because everyone else and oneself can talk himself into say-

27. "... das sich in der öffentlichen Ausgelegtheit konstituiert, die sich im Gerede ausdrückt." The earlier editions have "... konstituiert. Sie spricht sich aus im Gerede."

28. "Die Öffentlichkeit des alltäglichen Miteinander 'kennt' den Tod als ständig vorkommendes Begegnis, als "Todesfall."

29. "... man stirbt am Ende auch einmal, aber zunächst bleibt man selbst unbetroffen."

ing that "in no case is it I myself," for this "one" is *the "nobody."*³⁰ "Dying" is levelled off to an occurrence which reaches Dasein, to be sure, but belongs to nobody in particular. If idle talk is always ambiguous, so is this manner of talking about death. Dying, which is essentially mine in such a way that no one can be my representative, is perverted into an event of public occurrence which the "they" encounters. In the way of talking which we have characterized, death is spoken of as a "case" which is constantly occurring. Death gets passed off as always something "actual"; its character as a possibility gets concealed, and so are the other two items that belong to it—the fact that it is non-relational and that it is not to be outstripped. By such ambiguity, Dasein puts itself in the position of losing itself in the "they" as regards a distinctive potentiality-for-Being which belongs to Dasein's ownmost Self. The "they" gives its approval, and aggravates the *temptation* to cover up from oneself one's ownmost Being-towards-death. This evasive concealment in the face of death dominates everydayness so stubbornly that, in Being with one another, the "neighbours" often still keep talking the "dying person" into the belief that he will escape death and soon return to the tranquillized everydayness of the world of his concern. Such "solitude" is meant to "console" him. It insists upon bringing him back into Dasein, while in addition it helps him to keep his ownmost non-relational possibility-of-Being completely concealed. In this manner the "they" provides (*besorgt*) a *constant tranquillization about death*. At bottom, however, this is a tranquillization not only for him who is "dying" but just as much for those who "console" him. And even in the case of a demise, the public is still not to have its own tranquillity upset by such an event, or be disturbed in the carefreeness with which it concerns itself.³¹ Indeed the dying of Others is seen often enough as a social inconvenience, if not even a downright tactlessness, against which the public is to be guarded.

But along with this tranquillization, which forces Dasein away from its death, the "they" at the same time puts itself in the right and makes itself respectable by tacitly regulating the way in which *one* has to comport oneself towards death. It is already a matter of public acceptance that "thinking about death" is a cowardly fear, a sign of insecurity on the part of Dasein, and a sombre way of fleeing from the world. *The "they" does not permit us the courage for anxiety in the face of death.* The dominance of the manner in which things have been publicly interpreted by the "they," has already decided what state-of-mind is to determine our attitude towards death. In anxiety in the face of death, Dasein is brought face to face with itself as

30. "Die öffentliche Daseinsauslegung sagt: 'man stirbt,' weil damit jeder andere und man selbst sich einreden kann: je nicht gerade ich; denn dieses Man ist das *Niemand*." While we have usually followed the convention of translating the indefinite pronoun "man" as "one" and the expression "das Man" as "the 'they'," to do so here would obscure the point.

31. "Und selbst im Falle des Ablebens uoch soll die Öffentlichkeit durch das Ereignis nicht in ihrer besorgten Sorglosigkeit gestört und beunruhigt werden."

delivered over to that possibility which is not to be outstripped. The "they" concerns itself with transforming this anxiety into fear in the face of an oncoming event. In addition, the anxiety which has been made ambiguous as fear, is passed off as a weakness with which no self-assured Dasein may have any acquaintance. What is "fitting" (*Was sich . . . "gehört"*) according to the unuttered decree of the "they," is indifferent tranquillity as to the "fact" that one dies. The cultivation of such a "superior" indifference *alienates* Dasein from its ownmost non-relational potentiality-for-Being.

But temptation, tranquillization, and alienation are distinguishing marks of the kind of Being called "*falling*." As falling, everyday Being-towards-death is a constant *fleeing in the face of death*. Being-towards-the-end has the mode of *evasion in the face of it*—giving new explanations for it, understanding it inauthentically, and concealing it. Factually one's own Dasein is always dying already; that is to say, it is in a Being-towards-its-end. And it hides this Fact from itself by recoinning "death" as just a "case of death" in Others—an everyday occurrence which, if need be, gives us the assurance still more plainly that "oneself" is still "living." But in thus falling and fleeing *in the face of death*, Dasein's everydayness attests that the very "they" itself already has the definite character of *Being-towards-death*, even when it is not explicitly engaged in "thinking about death." *Even in average everydayness, this ownmost potentiality-for-Being, which is non-relational and not to be outstripped, is constantly an issue for Dasein. This is the case when its concern is merely in the mode of an untroubled indifference towards the uttermost possibility of existence.*³²

In setting forth everyday Being-towards-death, however, we are at the same time enjoined to try to secure a full existential conception of Being-towards-the-end, by a more penetrating Interpretation in which falling Being-towards-death is taken as an evasion *in the face of death*. *That in the face of which one flees* has been made visible in a way which is phenomenally adequate. Against this it must be possible to project phenomenologically the way in which evasive Dasein itself understands its death.

EVERYDAY BEING-TOWARDS-THE-END, AND THE FULL EXISTENTIAL CONCEPTION OF DEATH

In our preliminary existential sketch, Being-towards-the-end has been defined as Being towards one's ownmost potentiality-for-being, which is non-relational and is not to be outstripped. Being towards this possibility, as

32. ". . . wenn auch nur im Modus des Besorgens einer unbehelligten Gleichgültigkeit gegen die äusserste Möglichkeit seiner Existenz." Ordinarily the expression "Gleichgültigkeit gegen" means simply "indifference towards." But Heidegger's use of bold-face type suggests that here he also has in mind that "gegen" may mean "against" or "in opposition to."

a Being which exists, is brought face to face with the absolute impossibility of existence. Beyond this seemingly empty characterization of Being-towards-death, there has been revealed the concretion of this Being in the mode of everydayness. In accordance with the tendency to falling, which is essential to everydayness, Being-towards-death has turned out to be an evasion in the face of death—an evasion which conceals. While our investigation has hitherto passed from a formal sketch of the ontological structure of death to the concrete analysis of everyday Being-towards-the-end, the direction is now to be reversed, and we shall arrive at the full existential conception of death by rounding out our Interpretation of everyday Being-towards-the-end.

In explicating everyday Being-towards-death we have clung to the idle talk of the "they" to the effect that "one dies too, sometime, but not right away."³³ All that we have Interpreted thus far is the "one dies" as such. In the "sometime, but not right away," everydayness concedes something like a *certainty* of death. Nobody doubts that one dies. On the other hand, this "not doubting" need not imply that kind of Being-certain which corresponds to the way death—in the sense of the distinctive possibility characterized above—enters into Dasein. Everydayness confines itself to conceding the "certainty" of death in this ambiguous manner just in order to weaken that certainty by covering up dying still more and to alleviate its own thrownness into death.

By its very meaning, this evasive concealment in the face of death can *not* be *authentically* "certain" of death, and yet it *is* certain of it. What are we to say about the "certainty of death"?

To be certain of an entity means to *hold* it for true as something true.³⁴ But "truth" signifies the uncoveredness of some entity, and all uncoveredness is grounded ontologically in the most primordial truth, the disclosedness of Dasein. As an entity which is both disclosed and disclosing, and one which uncovers, Dasein is essentially "in the truth." *But certainty is grounded in the truth, or belongs to it equiprimordially.* The expression "certainty," like the term "truth," has a double signification. Primordially "truth" means the same as "Being-disclosive," as a way in which Dasein behaves. From this comes the derivative signification: "the uncoveredness of entities." Correspondingly, "certainty," in its primordial signification, is tantamount to "Being-certain," as a kind of Being which belongs to Dasein. However, in a derivative signification, any entity of which Dasein can be certain will also get called something "certain."

One mode of certainty is *conviction*. In conviction, Dasein lets the testi-

33. ". . . man stirbt auch einmal, aber vorläufig noch nicht."

34. "Eines Seienden gewiss-sein besagt: es als wahres für wahr *halten*." The earlier editions have "Gewisssein" instead of "gewiss-sein." Our literal but rather unidiomatic translation of the phrase "für wahr halten" seems desirable in view of Heidegger's extensive use of the verb "halten" ("hold") in subsequent passages where this phrase occurs, though this is obscured by our translating "halten sich in . . ." as "maintain itself in . . ." and "halten sich an . . ." as "cling to . . ." or "stick to . . ."

mony of the thing itself which has been uncovered (the true thing itself) be the sole determinant for its Being towards that thing understandingly.³⁵ Holding something for true is adequate as a way of maintaining oneself in the truth, if it is grounded in the uncovered entity itself, and, if, as Being towards the entity so uncovered, it has become transparent to itself as regards its appropriateness to that entity. In any arbitrary fiction or in merely having some "view" (*Ansicht*) about an entity, this sort of thing is lacking.

The adequacy of holding-for-true is measured according to the truth-claim to which it belongs. Such a claim gets its justification from the kind of Being of the entity to be disclosed, and from the direction of the disclosure. The kind of truth, and along with it, the certainty, varies with the way entities differ, and accords with the guiding tendency and extent of the disclosure. Our present considerations will be restricted to an analysis of Being-certain with regard to death; and this Being-certain will in the end present us with a distinctive *certainty of Dasein*.

For the most part, everyday Dasein covers up the ownmost possibility of its Being—that possibility which is non-relational and not to be outstripped. This factual tendency to cover up confirms our thesis that Dasein, as factual, is in the "untruth." Therefore the certainty which belongs to such a covering-up of Being-towards-death must be an inappropriate way of holding-for-true, and not, for instance, an uncertainty in the sense of a doubting. In inappropriate certainty, that of which one is certain is held covered up. If "one" understands death as an event which one encounters in one's environment, then the certainty which is related to such events does not pertain to Being-towards-the-end.

They say, "It is certain that 'Death' is coming."³⁶ They say it, and the "they" overlooks the fact that in order to be able to be certain of death, Dasein itself must in every case be certain of its ownmost non-relational potentiality-for-Being. They say, "Death is certain"; and in saying so, they implant in Dasein the illusion that it is *itself* certain of its death. And what is the ground of everyday Being-certain? Manifestly, it is not just mutual persuasion. Yet the "dying" of Others is something that one experiences daily. Death is an undeniable "fact of experience."

The way in which everyday Being-towards-death understands the certainty which is thus grounded, betrays itself when it tries to "think" about death, even when it does so with critical foresight—that is to say, in an appropriate manner. So far as one knows, all men "die." Death is probable in the highest degree for every man, yet it is not "unconditionally" certain. Taken strictly, a certainty which is "only" *empirical* may be attributed to death.

35. "In ihr lässt sich das Dasein einzig durch das Zeugnis der entdeckten (wahren) Sache selbst sein verstehendes Sein zu dieser bestimmen." The connection between "Überzeugung" ("conviction") and "Zeugnis" ("testimony") is obscured in our translation.

36. "Man sagt: es ist gewiss, dass 'der' Tod kommt."

Such certainty necessarily falls short of the highest certainty, the apodictic, which we reach in certain domains of theoretical knowledge.

In this "critical" determination of the certainty of death, and of its impendence, what is manifested in the first instance is, once again, a failure to recognize Dasein's kind of Being and the Being-towards-death which belongs to Dasein—a failure that is characteristic of everydayness. *The fact that demise, as an event which occurs, is "only" empirically certain, is in no way decisive as to the certainty of death.* Cases of death may be the factual occasion for Dasein's first paying attention to death at all. So long, however, as Dasein remains in the empirical certainty which we have mentioned, death, in the way that it "is," is something of which Dasein can by no means become certain. Even though, in the publicness of the "they," Dasein seems to "talk" only of this "empirical" certainty of death, *nevertheless at bottom* Dasein does *not* exclusively or primarily stick to those cases of death which merely occur. *In evading its death*, even everyday Being-towards-the-end is indeed certain of its death in another way than it might itself like to have true on purely theoretical considerations. This "other way" is what everydayness for the most part veils from itself. Everydayness does not dare to let itself become transparent in such a manner. We have already characterized the every-day state-of-mind which consists in an air of superiority with regard to the certain "fact" of death—a superiority which is "anxiously" concerned while seemingly free from anxiety. In this state-of-mind, everydayness acknowledges a "higher" certainty than one which is only empirical. One *knows* about the certainty of death, and yet "is" not authentically certain of one's own. The falling everydayness of Dasein is acquainted with death's certainty, and yet evades *Being*-certain. But in the light of what it evades, this very evasion attests phenomenally that death must be conceived as one's ownmost possibility, non-relational, not to be outstripped, and—above all—*certain*.

One says, "Death certainly comes, but not right away." With this "but . . .," the "they" denies that death is certain. "Not right away" is not a purely negative assertion, but a way in which the "they" interprets itself. With this interpretation, the "they" refers itself to that which is proximally accessible to Dasein and amenable to its concern. Everydayness forces its way into the urgency of concern, and divests itself of the fetters of a weary "inactive thinking about death." Death is deferred to "sometime later," and this is done by invoking the so-called "general opinion" (*allgemeine Ermessen*). Thus the "they" covers up what is peculiar in death's certainty—that it is possible at any moment. Along with the certainty of death goes the *indefiniteness* of its "when." Everyday Being-towards-death evades this indefiniteness by conferring definiteness upon it. But such a procedure cannot signify calculating when the demise will duly arrive. In the face of definiteness such as this, Dasein would sooner flee. Everyday concern makes definite for itself the indefiniteness of certain death by interposing before it

those urgencies and possibilities which can be taken in at a glance, and which belong to the everyday matters that are closest to us.

But when this indefiniteness has been covered up, the certainty has been covered up too. Thus death's ownmost character as a possibility gets veiled—a possibility which is certain and at the same time indefinite—that is to say, possible at any moment.

Now that we have completed our Interpretation of the everyday manner in which the "they" talks about death and the way death enters into Dasein, we have been led to the characters of certainty and indefiniteness. The full existential-ontological conception of death may now be defined as follows: *death, as the end of Dasein, is Dasein's ownmost possibility—non-relational, certain and as such indefinite, not to be outstripped. Death is, as Dasein's end, in the Being of this entity towards its end.*

Defining the existential structure of Being-towards-the-end helps us to work out a kind of Being of Dasein in which Dasein, *as Dasein*, can be a *whole*. The fact that even everyday Dasein already *is towards* its end—that is to say, is constantly coming to grips with its death, though in a "fugitive" manner—shows that this end, conclusive (*abschliessende*) and determinative for Being-a-whole, is not something to which Dasein ultimately comes only in its demise. In Dasein, as being towards its death, its own uttermost "not-yet" has already been included—that "not-yet" which all others lie ahead of.³⁷ So if one has given an ontologically inappropriate Interpretation of Dasein's "not-yet" as something still outstanding, any formal inference from this to Dasein's lack of totality will not be correct. *The phenomenon of the "not-yet" has been taken over from the "ahead-of-itself"; no more than the care-structure in general, can it serve as a higher court which would rule against the possibility of an existent Being-a-whole; indeed this "ahead-of-itself" is what first of all makes such a Being-towards-the-end possible.* The problem of the possible Being-a-whole of that entity which each of us is, is a correct one if care, as Dasein's basic state, is "connected" with death—the uttermost possibility for that entity.

Meanwhile, it remains questionable whether this problem has been as yet adequately worked out. Being-towards-death is grounded in care. Dasein, as thrown Being-in-the-world, has in every case already been delivered over to its death. In being towards its death, Dasein is dying factically and indeed constantly, as long as it has not yet come to its demise. When we say that Dasein is factically dying, we are saying at the same time that in its Being-towards-death Dasein has always decided itself in one way or another. Our everyday falling evasion *in the face of* death is an *inauthentic* Being-towards-

37. ". . . dem alle anderen vorgelagert sind. . . ." This clause is ambiguous, both in the German and in our translation, though the point is fairly clear. The ultimate "not-yet" is not one which all others "lie ahead of" in the sense that they lie beyond it or come after it; for nothing can "lie ahead of it" in this sense. But they *can* "lie ahead of it" in the sense that they might be actualized *before* the ultimate "not-yet" has been actualized.

death. But inauthenticity is based on the possibility of authenticity. Inauthenticity characterizes a kind of Being into which Dasein can divert itself and has for the most part always diverted itself; but Dasein does not necessarily and constantly have to divert itself into this kind of Being. Because Dasein exists, it determines its own character as the kind of entity it is, and it does so in every case in terms of a possibility which it itself *is* and which it understands.³⁸

Can Dasein also *understand authentically* its ownmost possibility, which is non-relational and not to be outstripped, which is certain and, as such, indefinite? That is, can Dasein maintain itself in an authentic Being-towards-its-end? As long as this authentic Being-towards-death has not been set forth and ontologically defined, there is something essentially lacking in our existential Interpretation of Being-towards-the-end.

Authentic Being-towards-death signifies an existentiell possibility of Dasein. This ontical potentiality-for-Being must, in turn, be ontologically possible. What are the existential conditions of this possibility? How are they themselves to become accessible?

EXISTENTIAL PROJECTION OF AN AUTHENTIC BEING-TOWARDS-DEATH

Factically, Dasein maintains itself proximally and for the most part in an inauthentic Being-towards-death. How is the ontological possibility of an *authentic* Being-towards-death to be characterized "Objectively," if, in the end, Dasein never comports itself authentically towards its end, or if, in accordance with its very meaning, this authentic Being must remain hidden from the Others? Is it not a fanciful undertaking, to project the existential possibility of so questionable an existentiell potentiality-for-Being? What is needed, if such a projection is to go beyond a merely fictitious arbitrary construction? Does Dasein itself give us any instructions for carrying it out? And can any grounds for its phenomenal legitimacy be taken from Dasein itself? Can our analysis of Dasein up to this point give us any prescriptions for the ontological task we have now set ourselves, so that what we have before us may be kept on a road of which we can be sure?

The existential conception of death has been established; and therewith we have also established what it is that an authentic Being-towards-the-end should be able to comport itself towards. We have also characterized inauthentic Being-towards-death, and thus we have prescribed in a negative way (*prohibitiv*) how it is possible for authentic Being-towards-death *not* to be. It is with these positive and prohibitive instructions that the existential edifice of an authentic Being-towards-death must let itself be projected.

38. "Weil das Dasein existiert, bestimmt es sich als Seiendes, wie es ist, je aus einer Möglichkeit, die es selbst *ist* und versteht."

Dasein is constituted by disclosedness—that is, by an understanding with a state-of-mind. *Authentic* Being-towards-death can *not evade* its ownmost non-relational possibility, or *cover up* this possibility by thus fleeing from it, or *give a new explanation* for it to accord with the common sense of the “they.” In our existential projection of an authentic Being-towards-death, therefore, we must set forth those items in such a Being which are constitutive for it as an understanding of death—and as such an understanding in the sense of Being towards this possibility without either fleeing it or covering it up.

In the first instance, we must characterize Being-towards-death as a *Being towards a possibility*—indeed, towards a distinctive possibility of Dasein itself. “Being towards” a possibility—that is to say, towards something possible—may signify “Being out for” something possible, as in concerning ourselves with its actualization. Such possibilities are constantly encountered in the field of what is ready-to-hand and present-at-hand—what is attainable, controllable, practicable, and the like. In concernfully Being out for something possible, there is a tendency to *annihilate the possibility* of the possible by making it available to us. But the concernful actualization of equipment which is ready-to-hand (as in producing it, getting it ready, readjusting it, and so on) is always merely relative, since even that which has been actualized is still characterized in terms of some involvements—indeed this is precisely what characterizes its Being. Even though actualized, it remains, as actual, something possible for doing something; it is characterized by an “in-order-to.” What our analysis is to make plain is simply how Being out for something concernfully, comports itself towards the possible: it does so not by the theoretico-thematical consideration of the possible as possible, and by having regard for its possibility as such, but rather by looking *circumspectively away* from the possible and looking at that for which it is possible (*das Wofür-möglich*).

Manifestly Being-towards-death, which is now in question, cannot have the character of concernfully Being out to get itself actualized. For one thing, death as possible is not something possible which is ready-to-hand or present-at-hand, but a possibility of *Dasein's* Being. So to concern oneself with actualizing what is thus possible would have to signify, “bringing about one's demise.” But if this were done, Dasein would deprive itself of the very ground for an existing Being-towards-death.

Thus, if by “Being towards death” we do not have in view an “actualizing” of death, neither can we mean “dwelling upon the end in its possibility.” This is the way one comports oneself when one “thinks about death,” pondering over when and how this possibility may perhaps be actualized. Of course such brooding over death does not fully take away from it its character as a possibility. Indeed, it always gets brooded over as something that is coming; but in such brooding we weaken it by calculating how we are to have it at our disposal. As something possible, it is to show as little

as possible of its possibility. On the other hand, if Being-towards-death has to disclose understandingly the possibility which we have characterized, and if it is to disclose it *as a possibility*, then in such Being-towards-death this possibility must not be weakened: it must be understood *as a possibility*, it must be cultivated *as a possibility*, and we must *put up with it as a possibility*, in the way we comport ourselves towards it.

However, Dasein comports itself towards something possible in its possibility by *expecting* it (*im Erwarten*). Anyone who is intent on something possible, may encounter it unimpeded and undiminished in its "whether it comes or does not, or whether it comes after all."³⁹ But with this phenomenon of expecting, has not our analysis reached the same kind of Being towards the possible to which we have already called attention in our description of "Being out for something" concernfully? To expect something possible is always to understand it and to "have" it with regard to whether and when and how it will be actually present-at-hand. Expecting is not just an occasional looking-away from the possible to its possible actualization, but is essentially a *waiting for that actualization* (*ein Warten auf diese*). Even in expecting, one leaps away from the possible and gets a foothold in the actual. It is for its actuality that what is expected is expected. By the very nature of expecting, the possible is drawn into the actual, arising out of the actual and returning to it.⁴⁰

But Being towards this possibility, as Being-towards-death, is so to comport ourselves towards *death* that in this Being, and for it, death reveals itself *as a possibility*. Our terminology for such Being towards this possibility is "*anticipation*" of this possibility.⁴¹ But in this way of behaving does there not lurk a coming-close to the possible, and when one is close to the possible, does not its actualization emerge? In this kind of coming close, however, one does not tend towards concernfully making available something actual; but as one comes closer understandingly, the possibility of the possible just becomes "greater." *The closest closeness which one may have in Being towards death as a possibility, is as far as possible from anything actual.* The more unveiledly this possibility gets understood, the more purely does the understanding penetrate into it *as the possibility of the impossibility of any existence at all*. Death, as possibility, gives Dasein nothing to be "actu-

39. "Für ein Gespanntsein auf es vermag ein Mögliches in seinem 'ob oder nicht oder schliesslich doch' ungehindert und ungeschmälert zu begegnen."

40. "Auch im Erwarten liegt ein Abspringen vom Möglichen und Fussfassen im Wirklichen, dafür das Erwartete erwartet ist. Vom Wirklichen aus und auf es zu wird das Mögliche in das Wirkliche erwartungsmässig hereingezogen."

41. ". . . *Vorlaufen in die Möglichkeit.*" While we have used "anticipate" to translate "vorgreifen," which occurs rather seldom, we shall also use it—less literally—to translate "vorlaufen," which appears very often in the following pages, and which has the special connotation of "running ahead." But as Heidegger's remarks have indicated, the kind of "anticipation" which is involved in Being-towards-death, does not consist in "waiting for" death or "dwelling upon it" or "actualizing" it before it normally comes; nor does "running ahead into it" in this sense mean that we "rush headlong into it."

alized," nothing which Dasein, as actual, could itself *be*. It is the possibility of the impossibility of every way of comporting oneself towards anything, of every way of existing. In the anticipation of this possibility it becomes "greater and greater"; that is to say, the possibility reveals itself to be such that it knows no measure at all, no more or less, but signifies the possibility of the measureless impossibility of existence. In accordance with its essence, this possibility offers no support for becoming intent on something, "picturing" to oneself the actuality which is possible, and so forgetting its possibility. Being-towards-death, as anticipation of possibility, is what first *makes* this possibility *possible*, and sets it free as possibility.

Being-towards-death is the anticipation of a potentiality-for-Being of that entity whose kind of Being is anticipation itself.⁴² In the anticipatory revealing of this potentiality-for-Being, Dasein discloses itself to itself as regards its uttermost possibility. But to project itself on its ownmost potentiality-for-Being means to be able to understand itself in the Being of the entity so revealed—namely, to exist. Anticipation turns out to be the possibility of understanding one's *ownmost* and uttermost potentiality-for-Being—that is to say, the possibility of *authentic existence*. The ontological constitution of such existence must be made visible by setting forth the concrete structure of anticipation of death. How are we to delimit this structure phenomenally? Manifestly, we must do so by determining those characteristics which must belong to an anticipatory disclosure so that it can become the pure understanding of that ownmost possibility which is non-relational and not to be outstripped—which is certain and, as such, indefinite. It must be noted that understanding does not primarily mean just gazing at a meaning, but rather understanding oneself in that potentiality-for-Being which reveals itself in projection.

Death is Dasein's *ownmost* possibility. Being towards this possibility discloses to Dasein its *ownmost* potentiality-for-Being, in which its very Being is the issue. Here it can become manifest to Dasein that in this distinctive possibility of its own self, it has been wrenched away from the "they." This means that in anticipation any Dasein can have wrenched itself away from the "they" already. But when one understands that this is something which Dasein "can" have done, this only reveals its factual lossiness in the everydayness of the they-self.

The ownmost possibility is *non-relational*. Anticipation allows Dasein to understand that that potentiality-for-being in which its ownmost Being is an issue, must be taken over by Dasein alone. Death does not just "belong" to one's own Dasein in an undifferentiated way; death *lays claim* to it as an *individual* Dasein. The non-relational character of death, as understood in anticipation, individualizes Dasein down to itself. This individualizing is a way in which the "there" is disclosed for existence. It makes manifest

42. ". . . dessen Seinsart das Vorlaufen selbst ist." The earlier editions have "hat" instead of "ist."

that all Being-alongside the things with which we concern ourselves, and all Being-with Others, will fail us when our ownmost potentiality-for-Being is the issue. Dasein can be *authentically itself* only if it makes this possible for itself of its own accord. But if concern and solicitude fail us, this does not signify at all that these ways of Dasein have been cut off from its authentically Being-its-Self. As structures essential to Dasein's constitution, these have a share in conditioning the possibility of any existence whatsoever. Dasein is authentically itself only to the extent that, *as* concerned Being-alongside and solicitous Being-with, it projects itself upon its ownmost potentiality-for-Being rather than upon the possibility of the they-self. The entity which anticipates its non-relational possibility is thus forced by that very anticipation into the possibility of taking over from itself its ownmost Being, and doing so of its own accord.

The ownmost, non-relational possibility is *not to be outstripped*. Being towards this possibility enables Dasein to understand that giving itself up impends for it as the uttermost possibility of its existence. Anticipation, however, unlike inauthentic Being-towards-death, does not evade the fact that death is not to be outstripped; instead, anticipation frees itself *for* accepting this. When, by anticipation, one becomes free *for* one's own death, one is liberated from one's lostness in those possibilities which may accidentally thrust themselves upon one; and one is liberated in such a way that for the first time one can authentically understand and choose among the factual possibilities lying ahead of that possibility which is not to be outstripped. Anticipation discloses to existence that its uttermost possibility lies in giving itself up, and thus it shatters all one's tenaciousness to whatever existence one has reached. In anticipation, Dasein guards itself against falling back behind itself, or behind the potentiality-for-Being which it has understood. It guards itself against "becoming too old for its victories" (Nietzsche). Free for its ownmost possibilities, which are determined by the *end* and so are understood as *finite* (*endliche*), Dasein dispels the danger that it may, by its own finite understanding of existence, fail to recognize that it is getting outstripped by the existence-possibilities of Others, or rather that it may explain these possibilities wrongly and force them back upon its own, so that it may divest itself of its ownmost factual existence. As the non-relational possibility, death individualizes—but only in such a manner that, as the possibility which is not to be outstripped, it makes Dasein, as Being-with, have some understanding of the potentiality-for-Being of Others. Since anticipation of the possibility which is not to be outstripped discloses also all the possibilities which lie ahead of that possibility, this anticipation includes the possibility of taking the *whole* of Dasein in advance (*Vorwegnehmens*) in an existentiell manner; that is to say, it includes the possibility of existing as a *whole potentiality-for-Being*.

The ownmost, non-relational possibility, which is not to be outstripped, is *certain*. The way *to be* certain of it is determined by the kind of truth

which corresponds to it (disclosedness). The certain possibility of death, however, discloses Dasein as a possibility, but does so only in such a way that, in anticipating this possibility, Dasein *makes* this possibility *possible* for itself as its ownmost potentiality-for-Being.⁴³ The possibility is disclosed because it is made possible in anticipation. To maintain oneself in this truth—that is, to be certain of what has been disclosed—demands all the more that one should anticipate. We cannot compute the certainty of death by ascertaining how many cases of death we encounter. This certainty is by no means of the kind which maintains itself in the truth of the present-at-hand. When something present-at-hand has been uncovered, it is encountered most purely if we just look at the entity and let it be encountered in itself. Dasein must first have lost itself in the factual circumstances (*Sachverhalte*) (this can be one of care's own tasks and possibilities) if it is to obtain the pure objectivity—that is to say, the indifference—of apodictic evidence. If Being-certain in relation to death does not have this character, this does not mean that it is of a lower grade, but that *it does not belong at all to the graded order of the kinds of evidence we can have about the present-at-hand*.

Holding death for true (death *is* just one's own) shows another kind of certainty, and is more primordial than any certainty which relates to entities encountered within-the-world, or to formal objects; for it is certain of Being-in-the-world. As such, holding death for true does not demand just *one* definite kind of behaviour in Dasein, but demands Dasein itself in the full authenticity of its existence. In anticipation Dasein can first make certain of its ownmost Being in its totality—a totality which is not to be outstripped. Therefore the evidential character which belongs to the immediate givenness of Experiences, of the "I," or of consciousness, must necessarily lag behind the certainty which anticipation includes. Yet this is not because the way in which these are grasped would not be a rigorous one, but because in principle such a way of grasping them cannot hold *for true* (disclosed) something which at bottom it insists upon "having there" as true: namely, Dasein itself, which I myself *am*, and which, as a potentiality-for-Being, I can be authentically only by anticipation.

The ownmost possibility, which is non-relational, not to be outstripped, and certain, is *indefinite* as regards its certainty. How does anticipation disclose this characteristic of Dasein's distinctive possibility? How does the anticipatory understanding project itself upon a potentiality-for-Being which is certain and which is constantly possible in such a way that the "when"

43. "Die gewisse Möglichkeit des Todes erschliesst das Dasein aber als Möglichkeit nur so, dass es vorlaufend zu ihr diese Möglichkeit als eigenstes Seinkönnen für sich ermöglicht." While we have taken "Die gewisse Möglichkeit des Todes" as the subject of this puzzling sentence, "das Dasein" *may* be the subject instead. The use of the preposition "zu" instead of the usual "in" after "vorlaufend" suggests that in "anticipating" the possibility of death, Dasein is here thought of as "running ahead" *towards* it or *up to* it rather than *into* it. When this construction occurs in later passages, we shall indicate it by subjoining "zu" in brackets.

in which the utter impossibility of existence becomes possible remains constantly indefinite? In anticipating [zum] the indefinite certainty of death, Dasein opens itself to a constant *threat* arising out of its own "there." In this very threat Being-towards-the-end must maintain itself. So little can it tone this down that it must rather cultivate the indefiniteness of the certainty. How is it existentially possible for this constant threat to be genuinely disclosed? All understanding is accompanied by a state-of-mind. Dasein's mood brings it face to face with the thrownness of its "that-it-is-there." *But the state-of-mind which can hold open the utter and constant threat to itself arising from Dasein's ownmost individualized Being, is anxiety.*⁴⁴ In this state-of-mind, Dasein finds itself *face to face* with the "nothing" of the possible impossibility of its existence. Anxiety is anxious *about* the potentiality-for-Being of the entity so destined (*des so bestimmten Seienden*), and in this way it discloses the uttermost possibility. Anticipation utterly individualizes Dasein, and allows it, in this individualization of itself, to become certain of the totality of its potentiality-for-Being. For this reason, anxiety as a basic state-of-mind belongs to such a self-understanding of Dasein on the basis of Dasein itself.⁴⁵ Being-towards-death is essentially anxiety. This is attested unmistakably, though "only" indirectly, by Being-towards-death as we have described it, when it perverts anxiety into cowardly fear and, in surmounting this fear, only makes known its own cowardliness in the face of anxiety.

We may now summarize our characterization of authentic Being-towards-death as we have projected it existentially: *anticipation reveals to Dasein its lostness in the they-self, and brings it face to face with the possibility of being itself, primarily unsupported by concerned solicitude, but of being itself, rather, in an impassioned freedom towards death—a freedom which has been released from the Illusions of the "they," and which is factual, certain of itself, and anxious.*

All the relationships which belong to Being-towards-death, up to the full content of Dasein's uttermost possibility, as we have characterized it, constitute an anticipation which they combine in revealing, unfolding, and holding fast, as that which makes this possibility possible. The existential projection in which anticipation has been delimited, has made visible the *ontological* possibility of an existentiell Being-towards-death which is authentic. Therewith, however, the possibility of Dasein's having an authentic potentiality-for-Being-a-whole emerges, *but only as an ontological possibility.* In our existential projection of anticipation, we have of course clung to those

44. "Die Befindlichkeit aber, welche die ständige und schlechthinige, aus dem eigensten vereinzelten Sein des Daseins aufsteigende Bedrohung seiner selbst offen zu halten vermag, ist die Angst." Notice that "welche" may be construed either as the subject or as the direct object of the relative clause.

45. "... gehört zu diesem Sichverstehen des Daseins aus seinem Grunde die Grundbefindlichkeit der Angst." It is not grammatically clear whether "seinem" refers to "Sichverstehen" or to "Daseins."

structures of Dasein which we have arrived at earlier, and we have, as it were, let Dasein itself project itself upon this possibility, without holding up to Dasein an ideal of existence with any special "content," or forcing any such ideal upon it "from outside." Nevertheless, this existentially "possible" Being-towards-death remains, from the existentiell point of view, a fantastical exaction. The fact that an authentic potentiality-for-Being-a-whole is ontologically possible for Dasein, signifies nothing, so long as a corresponding ontical potentiality-for-Being has not been demonstrated in Dasein itself. Does Dasein ever factually throw itself into such a Being-towards-death? Does Dasein *demand*, even by reason of its ownmost Being, an authentic potentiality-for-Being determined by anticipation?

Before answering these questions, we must investigate whether to *any* extent and in any way Dasein *gives testimony*, from its ownmost potentiality-for-Being, as to a possible *authenticity* of its existence, so that it not only makes known that in an existentiell manner such authenticity is possible, but *demands* this of itself.

The question of Dasein's authentic Being-a-whole and of its existential constitution still hangs in mid-air. It can be put on a phenomenal basis which will stand the test only if it can cling to a possible authenticity of its Being which is attested by Dasein itself. If we succeed in uncovering that attestation phenomenologically, together with what it attests, then the problem will arise anew as to *whether the anticipation of [zum] death, which we have hitherto projected only in its ontological possibility, has an essential connection with that authentic potentiality-for-being which has been attested.*

Selected Bibliography

Heidegger's most influential work is *Sein und Zeit*, Part I, *Jahrbuch für Philosophie und phänomenologische Forschung*, Vol. 8, 1927; also separately, Halle, Niemeyer Verlag, 1927; English translation by J. Macquarrie and E. S. Robinson under the title *Being and Time*, New York, Harper & Row, 1962. The following are Heidegger's other major works:

- (1) *Kant und das Problem der Metaphysik*, Bonn, F. Cohen, 1929, which combines an unorthodox interpretation of Kant with an attempt to show forth the nature of phenomenological investigations into Being. This work is judged to be a gross misunderstanding of Kant by two recognized Kant scholars, Ernst Cassirer (see his review of Heidegger's book in *Kantstudien*, Vol. 36, 1931) and H. Levy (See *Logos*, Vol. 21, 1932).

- (2) *Von Wesen des Grunde*, Halle, Niemeyer Verlag, 1929, 1st edition; offprint from *Jahrbuch für Philosophie und phänomenologische Forschung: Festschrift für E. Husserl*, 1929; 3rd edition with foreword added, Frankfurt, Vittorio Klostermann, 1949, in which Heidegger's main concern is to explain that "The Nothing" (*Das Nichts*), which is the ground, "The transcendental horizon of *Dasein*," is not absolutely nothing at all. It is possibility, a *Seinsverständnis*, which may be roughly rendered as (the-possibility-of)-understanding-Being. But what this might mean is hard to make out.
 - (3) *Was ist Metaphysik?*, 1st edition, 1930, 5th edition, with Introduction and Postscript added, Frankfurt, Klostermann, 1949; English translation, *What is Metaphysics?* in *Existence and Being*, W. Brock (ed.), Chicago, Regnery, 1949. In the Postscript, Heidegger summarizes the main theses of *What is Metaphysics?* as follows: (a) The Nothing (*Das Nichts*) is, and it is at the heart of the essence of Being. (b) Logic is not fundamental; there is another thinking which is fundamental. (Presumably, this "more fundamental" thinking is the phenomenological grasp of Being.) (c) The human situation (the essence of *Dasein*) is *Angst* (anxiety); *Dasein*'s grasp of its own essence leads *Dasein* to grasp the meaning of Being. An English translation of the Introduction in the 5th edition is included in Walter Kaufmann, *Existentialism from Dostoevsky to Sartre*, New York, Meridian Books, Inc., 1956.
 - (4) *Platons Lehre von Wahrheit, mit einem Brief über den "Humanismus,"* Bern, A. Francke, 1947, was first published in Volume 2 of E. Grassi's *Geistige Überlieferung*, 1942; the latter on humanism, added in 1947, contains Heidegger's own contrast between himself and Sartre. *Platons Lehre* has as a companion piece, (5) *Vom Wesen der Wahrheit*, Frankfurt, Klostermann, 1943, English translation in W. Brock (ed.), *Existence and Being*. It opens with two sections devoted to the "ordinary" and "metaphysical" conceptions of truth, finds them defective and presents Heidegger's own views that truth is essentially "freedom"; it is *Dasein*'s freely "opening" a world which directly reveals itself.
 - (6) *Erläuterung zu Hölderlins Dichtung*, Frankfurt-am-Main, Klostermann, 1944, is an exegesis of Hölderlin, the German romantic poet in whom Heidegger finds many profound existential insights.
 - (7) *Einführung in die Metaphysik*, 1953, English translation by Ralph Manheim, *Introduction to Metaphysics*, New Haven, Yale University Press, 1959, like *Being and Time* it seeks an understanding of Being, but the approach is different from that of *Being and Time*. In the earlier book Heidegger tries to "open up" Being to us by taking, as his point of departure, the being of "that which we ourselves are," namely, *Dasein*. In the later book Heidegger's point of departure is a philological reconstruction of the dark sayings of the pre-Socratics about Being. The reconstruction is found to be untenable by classical philologists.
- Expository accounts of Heidegger's philosophy are found in: W. Barrett, *Irrational Man*, Garden City, N.Y., Doubleday & Co., 1958; I. M. Bochenski, *Contemporary European Philosophy*, Berkeley, Calif., University of California Press, 1956; J. Collins, *The Existentialists*, Chicago, Ill., Regnery, 1952, which also contains a useful bibliography; T. Langan, *The Meaning of Heidegger*, New York, Columbia University Press, 1959; John Wild,

The Challenge of Existentialism, Bloomington, Ind., University of Indiana Press, 1955; M. Wyschogrod, *Kierkegaard and Heidegger*, New York, Humanities Press, 1954. Langan, Wild, Wyschogrod and Collins attempt some criticism, but they are generally sympathetic; Barrett endorses Heidegger wholesale. M. Farber is decidedly critical of Heidegger in his "Descriptive Philosophy and Human Existence" in *Philosophic Thought in France and the United States*, M. Farber (ed.), Buffalo, N.Y., University of Buffalo Press, 1950. J. Passmore, too, is critical in the final chapter of his *Hundred Years of Philosophy*, London, Duckworth, 1957. Another critical exposition is M. Grene, *Martin Heidegger*, New York, Hillary House, 1957. The 1950 and 1960 volumes of the *Revue internationale de philosophie* contain up-to-date bibliographies of literature about Heidegger.

PAUL TILlich

1886–

Introduction

Paul Tillich is one of the most influential Christian thinkers of our time—perhaps the most influential in English-speaking countries. Born in a small village in eastern Germany in 1886, the son of a Lutheran pastor, he received a theological and philosophical education, and was ordained in the Evangelical Lutheran Church in 1912. After serving as an army chaplain during World War I, Tillich taught theology and philosophy at several German universities—Berlin, Marburg, Dresden, and Frankfurt. He incurred the wrath of the Nazis, and when Hitler came to power in 1933 he emigrated to the United States. On his arrival in America he became a Professor of theology at Union Theological Seminary. From this post Tillich has exercised an enormous influence on religious thought in this country. More recently he has occupied a University Professorship at Harvard University.

Tillich's religious thought represents a noteworthy attempt to exploit existentialist insights into the "human situation," while refusing to surrender the claim of religion to make contact, cognitive and otherwise, with a transcendent reality. To get some perspective on this let us go back to Søren Kierkegaard (1813–1855), the Danish thinker who is usually regarded as the father of existentialism. Kierkegaard interjected a new note into Western religious thought (although anticipations can be found in some earlier men, such as Pascal) by repudiating any "objective" approach to

religious questions, and any other questions that are decisive for "human existence," that is, for the way one shapes one's life. Specifically Kierkegaard was reacting against Hegel and his attempt to derive the basic features of reality from pure *a priori* thinking and, on the basis of this, to interpret and evaluate the facets of human culture, including religion, from a completely impersonal standpoint. To Kierkegaard it seemed monstrous for anyone to pretend to be capable of dealing with fundamental issues of human life from a neutral standpoint. He insisted that one could approach such problems only as a particular "existing" human being, with all the limitations and special features entailed by one's particular perspective. He ridiculed Hegel's system as having "a comical presupposition, occasioned by its having forgotten, in a sort of world-historical absentmindedness, what it means to be a human being. Not indeed, what it means to be a human being in general; for this is the sort of thing that one might even induce a speculative philosopher to agree to; but what it means that you and I and he are human beings, each one for himself."¹

No, the question is as to the mode of the subject's acceptance; and it must be regarded as an illusion rooted in the demoralization which remains ignorant of the subjective nature of the decision, or as an evasion springing from the disingenuousness which seeks to shirk the decision by an objective mode of approach, wherein there can in all eternity be no decision, to assume that the transition from something objective to the subjective acceptance is a direct transition, following upon the objective deliberation as a matter of course. On the contrary, the subjective acceptance of Christianity . . . is paganism or thoughtlessness.²

This goes along with giving up any attempt to prove the existence of God or other items of religious faith, as one establishes a scientific theory, by means of a detached logical argument. Moreover—and this is a more radical step—Kierkegaard insisted that the character of the religious mode of existence is such that the inquiry into the objective truth of religious beliefs cannot (or at least should not) arise. What is of interest to the religious man is the mode of *his relation to God*, the manner in which his being is to be transformed in the religious life. This interest is so absorbing that it leaves no room for the investigation of objective truth. "The existing individual who chooses the subjective way apprehends instantly the entire dialectical difficulty involved in having to use some time, perhaps a long time, in finding God objectively; and he feels this dialectical difficulty in all its painfulness, because . . . every moment is wasted in which he does not have God."³ Indeed, if a person does concern himself with matters of proof and evidence, that shows that he has missed the point of religious faith. Objective uncertainty, so far from being a hindrance to faith is a necessary condition for the inward passion which is essential to faith.

I contemplate the order of nature in the hope of finding God, and I see omnipotence and wisdom; but I also see much else that disturbs my mind and excites anxiety. The sum of all this is an objective uncertainty. But it is for this very reason that the inwardness becomes as intense as it is, for it embraces this objective uncertainty with the entire passion of the infinite. . . . Faith is precisely the contradiction between the infinite passion of the individual's inward-

ness and the objective uncertainty. If I am capable of grasping God objectively, I do not believe, but precisely because I cannot do this I must believe. If I wish to preserve myself in faith I must constantly be intent upon holding fast the objective uncertainty, so as to remain out upon the deep, over seventy thousand fathoms of water.⁴

Tillich, like many religious thinkers of the twentieth century, has been profoundly influenced by this reorientation. He has not gone so far as Kierkegaard in denying the religious relevance of rational investigation; he does think that ontology gives some support to religion, although not by way of giving metaphysical proofs of specific religious doctrines (which is what Kierkegaard was attacking).^{*} But he does wholeheartedly embrace the typically existentialist conviction that religious questions are appropriately raised in the context of the problems inherent in the "human situation." In Tillich's "dialectical theology" the doctrines of Christianity are presented as resolutions of these problems. For example, Tillich gives a sensitive and searching discussion of the types of anxiety to which even nonneurotic man is subject: the anxiety of death, the anxiety of meaninglessness, the anxiety of guilt (see especially his *The Courage to Be*).⁵ Tillich construes these forms of anxiety as modes of response to various threats from non-being, to which existence as such is subject. Theology then presents God as the solution to this problem. Note that this is a practical solution to a practical problem, not a resolution of a theoretical puzzle. God is said to constitute a solution to the problem in the sense that by participating in the infinite power to resist the threat of non-being, which *is* God, man acquires the courage to live a full life in the face of such anxiety. Again, Tillich presents the doctrine of the Kingdom of God as a solution to the perplexities and despair into which one falls when he experiences the "tragic ambiguities of our historical existence"⁶; viewed in this light the notion of the Kingdom of God is seen as "the meaning, fulfillment, and unity of history."⁷ And so with the other main Christian doctrines.

This concern with the religious significance of the "human situation" is also reflected in Tillich's preoccupation with the "theology of culture," that is, with the theological significance of such cultural forms as art, literature, and psychotherapy. It is Tillich's conviction—expressed in both his life and his thought—that a theologian must immerse himself in the culture of his time if he is to make his interpretation relevant to it.

Again, Tillich is typically existentialist in that he finds the key to the ontological structure of reality in an analysis of human existence, more precisely, of man's encounter with his environment. (The immediate inspiration here is Heidegger, see pp. 682–686.) Tillich plumps for "an understanding of man as that being in whom all levels of being are united and approachable. . . . Man occupies a pre-eminent position in ontology, not as an outstanding object among other objects, but as that being who asks the ontological question and in whose self-awareness the ontological answer can be found."⁸ After approvingly citing Heidegger's principle that *Dasein* is "the place where the structure of being is manifest," Tillich goes on to say: "Man is able to answer the onto-

* (See pp. 743 ff. for a specification of the way in which Tillich thinks some ontological support can be given to religion.)

logical question himself because he experiences directly and immediately the structure of being and its elements."⁹ And this means that "The interdependence of ego-self and world is the basic ontological structure and implies all the others."¹⁰ Of course, not every being has a self in quite the same way as a man, but since the only point at which we have any insight into the structure of being is human existence, we can get at the being of other things only by analogy to man. "Therefore selfhood or self-centeredness must be attributed in some measure to all living things and, in terms of analogy, to all individual *Gestalten* even in the inorganic realm."¹¹ A survey of what Tillich takes to be the elements constituting the ontological structure—individualization and participation, dynamics and form, freedom and destiny—indicates that here too, particularly in the last pair, Tillich is taking concepts that have their primary application to human existence and then attempting to stretch them to fit being as such (cf. Whitehead's method of "descriptive generalization").

One of Tillich's most important achievements is his penetrating description of faith, construed as a way of organizing human experience and activity. Faith or, to use Tillich's favorite expression, "ultimate concern" involves the following basic elements:

1. An unconditional surrender to something (x), the willingness to recognize x to hold absolute authority over one's life.
2. An expectation that one will somehow receive a supreme fulfillment through one's encounter and commerce with x .
3. Finding in x a center of meaningfulness. That is, everything in one's life and one's world gets significance insofar as it is related in some way to x .
4. Experiencing x as holy. (See p. 742 for an analysis of this mode of experience.)

According to Tillich, every human being has an ultimate concern, although the x 's toward which such concern is directed vary enormously—supernatural beings (Jesus Christ, Caesar, Buddha), nations, social classes, political movements, cultural forms such as science or music. One may doubt that ultimate concern, as described in Tillich's somewhat extravagant terms, can be found in every man. Tillich seems not to have taken account of wide differences in the extent to which individuals have oriented themselves around a single object. Total integration seems to be a rare achievement. Moreover, Tillich seems to overlook some crucial differences between concern with an existent object (or one believed to be existent) and concern with, or for, the realization of a goal such as financial success. But it cannot be denied that Tillich has given a penetrating analysis of religiosity, an analysis that reveals its important affinities with modes of personal organization outside what is usually called religion, such as nationalistic fervor and devotion to scientific inquiry.

But Tillich's concern extends beyond a psychological characterization of the religious mode of life. He attempts to show that this mode carries with it a reference to a reality outside itself, and thus can claim validity as something more than an organization of purely human attitudes and feelings. At the same time Tillich is averse to any reliance on traditional metaphysical proofs of the existence of a personal God. In fact he finds the concept of a supernatural person quite unacceptable as a component in a metaphysical scheme. The doctrine of the existence of a supernatural person, like all religious doctrines, is an attempt to

symbolize an ultimate reality, "being-itself," which is so ultimate that nothing can be said about it in literal terms, except that it is ultimate. What Tillich does is to claim that *ultimate* concern, as a subjective state, must somehow have what is truly *ultimate* as its object.

When the position is flatly asserted in this way it seems that Tillich has fallen into a verbal trap. From the fact that a concern is ultimate (in the sense of being dominant in the individual's personality structure) it does not follow that the object of the concern is ultimate, in the metaphysical sense of being that on which all else depends for its being. However, elsewhere Tillich tries to justify this claim by saying: "Nothing can be of ultimate concern for us which does not have the power of threatening and saving our being . . . the term 'being' means the whole of human reality, the structure, the meaning, and the aim of existence. . . . Man is ultimately concerned about that which determines his ultimate destiny beyond all preliminary necessities and accidents."¹² Here Tillich seems to be saying that one can only be *properly* or *advisedly* ultimately concerned about what is metaphysically ultimate, rather than that one in fact is always so concerned. But from this it is a short step to saying that in ultimate concern one is always *really* concerned with being-itself, whether one realizes it or not.

But then what becomes of the various concrete, nonultimate entities that are taken as objects of ultimate concern? It must be remembered that, on Tillich's own account, those who have an ultimate concern are not, in general, consciously in contact with some ineffable metaphysical Ultimate, but rather with something relatively concrete, such as a person or a social group. Tillich's answer is that these concrete foci of concern are functioning as symbols of the Ultimate. They are manifestations of the Ultimate to the ones who experience them as holy, and for those persons they *point to* the Ultimate. Thus ultimate concern has, on its objective side, a two-layered structure. Here, it seems to me, we come to the fundamental difficulty of Tillich's thought. So far as I can see, Tillich has not given an intelligible account of what it is for something to "point to" the Ultimate. The phrase is suggestive, but at present it is only suggestive.

We can now make explicit the way in which Tillich thinks that religion can receive a metaphysical underpinning. Metaphysics has the task of explicating and justifying the concept of being-itself as an ultimate reality. If we can then show that religion is concerned with its explicit objects of worship as symbols of being-itself, we will have shown that religion is a way of getting into effective contact with what is really fundamental in the nature of things.

Tillich is not content with simply delineating the structure of ultimate concern in general. He wants to find in his account some basis for evaluating ultimate concerns. He wants to be able to say that some are more adequate than others; and as a Christian theologian he wants to be able to say that the Christian concern is the most adequate. Tillich sometimes talks as if we can brand some forms of ultimate concern as "idolatrous," on the basis that they are directed to finite objects rather than to the Ultimate, or because they try to put finite things in the place of the Ultimate. By Tillich's own principles this will not do the job. On his account, there is a finite object in every case of ultimate concern. But, equally, in every case that finite object is functioning

as a symbol of being itself; if it were not, there would be no ultimate concern.¹³ It would seem, then, that the ranking could be made only in terms of the relative fitness of different concrete objects to serve as symbols of being itself. The reader is invited to examine Tillich's discussion and to decide whether a tenable principle of discrimination is presented.

Whatever may be the seriousness of these difficulties, it remains true that Tillich not only has presented a penetrating analysis of the human situation but also, in his *Systematic Theology*, has given a fresh and striking statement of the Christian faith.

W. P. A.

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2. *Ibid.*, pp. 115-116.
3. *Ibid.*, pp. 178-179.
4. *Ibid.*, p. 182.
5. Paul Tillich, *The Courage to Be*, New Haven, Yale University Press, 1952.
6. Paul Tillich, *Systematic Theology*, Vol. I, London, Nisbet, 1953, p. 69.
7. *Ibid.*, p. 72.
8. *Ibid.*, p. 187.
9. *Loc. cit.*
10. *Ibid.*, p. 189.
11. *Ibid.*, p. 188.
12. *Ibid.*, p. 17.
13. For a further development of this point, see William P. Alston, "Tillich on Idolatry," *Journal of Religion* (1958).

Systematic Theology

by **PAUL TILLICH**

CHAPTER I: THE NATURE OF SYSTEMATIC THEOLOGY

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❏ *Two Formal Criteria of Early Theology**

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We have used the term "ultimate concern" without explanation. Ultimate concern is the abstract translation of the great commandment: "The Lord, our God, the Lord is one; and you shall love the Lord your God with all your heart, and with all your soul, and with all your mind, and with all your strength."¹ The religious concern is ultimate; it excludes all other concerns from ultimate significance; it makes them preliminary. The ultimate concern is unconditional, independent of any conditions of character, desire or circumstance. The unconditional concern is total: no part of ourselves or of our world is excluded from it; there is no "place to flee from it."² The total concern is infinite: no moment of relaxation and rest is possible in the face of a religious concern which is ultimate, unconditional, total, and infinite.

The word "concern" points to the "existential" character of religious experience. We cannot speak adequately of the "object of religion" without simultaneously removing its character as an ultimate concern. It is the correlate of an unconditional concern but not a "highest thing" called "the absolute" or "the unconditioned," about which we could argue in detached objectivity. It is the object of total surrender, demanding also the surrender of our subjectivity while we look at it. It is a matter of infinite passion and interest (Kierkegaard), making us its object whenever we try to make it our object. For this reason we have avoided terms like "*the* ultimate," "*the* unconditioned," "*the* universal," "*the* infinite," and have spoken of ultimate, unconditional, total infinite concern. Of course, in every concern there is *something* about which one is concerned; but this something should not

* Reprinted with the permission of the University of Chicago Press, from P. Tillich, *Systematic Theology*, Vol. I, London, Nisbet & Co., Ltd., 1953.

1. Mark 12:29 (Revised Standard Version).

2. Psalm 139.

appear as a separated object which could be known and handled without concern. This, then, is the first formal criterion of theology: *The object of theology is what concerns us ultimately. Only those propositions are theological which deal with their object in so far as it can become a matter of ultimate concern for us.*

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But this is not its entire meaning. Although it does not indicate the content of the ultimate concern and its relation to the preliminary concerns, it has implications in both respects. There are three possible relations of the preliminary concerns to that which concerns us ultimately. The first is mutual indifference, the second is a relation in which a preliminary concern is elevated to ultimacy, and the third is one in which a preliminary concern becomes the vehicle of the ultimate concern without claiming ultimacy for itself. The first relation is predominant in ordinary life with its oscillation between conditional, partial, finite situations and experiences and moments when the question of the ultimate meaning of existence takes hold of us. Such a division, however, contradicts the unconditional, total, and infinite character of the religious concern. It places our ultimate concern beside other concerns and deprives it of its ultimacy. This attitude sidesteps the ultimacy of the biblical commandments and that of the first theological criterion. The second relation is idolatrous in its very nature. Idolatry is the elevation of a preliminary concern to ultimacy. Something essentially conditioned is taken as unconditional, something essentially partial is boosted into universality, and something essentially finite is given infinite significance (the best example is the contemporary idolatry of religious nationalism). The conflict between the finite basis of such a concern and its infinite claim leads to a conflict of ultimates; it radically contradicts the biblical commandments and the first theological criterion. The third relation between the ultimate concern and the preliminary concerns makes the latter bearers and vehicles of the former. That which is a finite concern is not elevated to infinite significance, nor is it put beside the infinite, but in and through it the infinite becomes real. Nothing is excluded from this function. In and through every preliminary concern the ultimate concern can actualise itself. Whenever this happens, the preliminary concern becomes a possible object of theology. But theology deals with it only in so far as it is a medium, a vehicle, pointing beyond itself.

Pictures, poems, and music can become objects of theology, not from the point of view of their aesthetic form, but from the point of view of their power of expressing some aspects of that which concerns us ultimately, in and through their aesthetic form. Physical or historical or psychological insights can become objects of theology, not from the point of view of their cognitive form, but from the point of view of their power of revealing some aspects of that which concerns us ultimately in and through their cognitive

form. Social ideas and actions, legal projects and procedures, political programmes and decisions, can become objects of theology, not from the point of view of their social, legal, and political form, but from the point of view of their power of actualising some aspects of that which concerns us ultimately in and through their social, legal, and political forms. Personality problems and developments, educational aims and methods, bodily and mental healing, can become objects of theology, not from the point of view of their ethical and technical form, but from the point of view of their power of mediating some aspects of that which concerns us ultimately in and through their ethical and technical form.

The question now arises: What *is* the content of our ultimate concern? What *does* concern us conditionally? The answer, obviously, cannot be a special object, not even God, for the first criterion of theology must remain formal and general. If more is to be said about the nature of our ultimate concern, it must be derived from an analysis of the concept "ultimate concern." *Our ultimate concern is that which determines our being or non-being. Only those statements are theological which deal with their object in so far as it can become a matter of being or non-being for us.* This is the second formal criterion of theology.

Nothing can be of ultimate concern for us which does not have the power of threatening and saving our being. The term "being" in this context does not designate existence in time and space. Existence is continuously threatened and saved by things and events which have no ultimate concern for us. But the term "being" means the whole of human reality, the structure, the meaning, and the aim of existence. All this is threatened; it can be lost or saved. Man is ultimately concerned about his being and meaning. "To be or not to be" in *this* sense is a matter of ultimate, unconditional, total, and infinite concern. Man is infinitely concerned about the infinity to which he belongs, from which he is separated, and for which he is longing. Man is totally concerned about the totality which is his true being and which is disrupted in time and space. Man is unconditionally concerned about that which determines his ultimate beyond all preliminary necessities and accidents.

The second formal criterion of theology does not point to any special content, symbol, or doctrine. It remains formal and, consequently, open for contents which are able to express "that which determines our being or non-being." At the same time it excludes contents which do not have this power from entering the theological realm. Whether it is a god who is a being beside others (even a highest being) or an angel who inhabits a celestial realm (called the realm of "spirits") or a man who possesses supernatural powers (even if he is called a god-man)—none of these is an object of theology if it fails to withstand the criticism of the second formal criterion of theology, that is, if it is not a matter of being or non-being for us.

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¶ *Theology and Philosophy: A Question*

Theology claims that it constitutes a special realm of knowledge, that it deals with a special object and employs a special method. This claim places the theologian under the obligation of giving an account of the way in which he relates theology to other forms of knowledge. He must answer two questions: What is the relationship of theology to the special sciences (*Wissenschaften*) and what is its relationship to philosophy? The first question has been answered implicitly by the preceding statement of the formal criteria of theology. If nothing is an object of theology which does not concern us ultimately, theology is unconcerned about scientific procedures and results and vice versa. Theology has no right and no obligation to prejudice a physical or historical, sociological or psychological, inquiry. And no result of such an inquiry can be directly productive or disastrous for theology. The point of contact between scientific research and theology lies in the philosophical element of both, the sciences and theology. Therefore, the question of the relation of theology to the special sciences merges into the question of the relation between theology and philosophy.

The difficulty of this question lies partly in the fact that there is no generally accepted definition of philosophy. Every philosophy proposes a definition which agrees with the interest, purpose, and method of the philosopher. Under these circumstances the theologian can only suggest a definition of philosophy which is broad enough to cover most of the important philosophies which have appeared in what usually is called the history of philosophy. The suggestion made here is to call philosophy *that cognitive approach to reality in which reality as such is the object*. Reality as such, or reality as a whole, is not the whole of reality; it is the structure which makes reality a whole and therefore a potential object of knowledge. Inquiring into the nature of reality as such means inquiring into those structures, categories, and concepts which are presupposed in the cognitive encounter with every realm of reality. From this point of view philosophy is by definition critical. It separates the multifarious materials of experience from those structures which make experience possible. There is no difference in this respect between constructive idealism and empirical realism. The question regarding the character of the general structures that make experience possible is always the same. It is *the* philosophical question.

The critical definition of philosophy is more modest than those philosophical enterprises which try to present a complete system of reality, including the results of all the special sciences as well as the general structures of pre-scientific experience. Such an attempt can be made from "above" or from "below." Hegel worked from "above" when he filled the categorical forms, developed in his *Logic*, with the available material of the scientific knowledge of his time and adjusted the material to the categories. Wundt

worked from "below" when he abstracted general and metaphysical principles from the available scientific material of his time, with the help of which the entire sum of empirical knowledge could be organised. Aristotle worked from both "above" and "below" when he carried through metaphysical and scientific studies in interdependence. This also was the ideal of Leibniz when he sketched a universal calculus capable of subjecting all of reality to mathematical analysis and synthesis. But in all these cases the limits of the human mind, the finitude which prevents it from grasping the whole, became visible. No sooner was the system finished than scientific research trespassed its boundaries and disrupted it in all directions. Only the general principles were left, always discussed, questioned, changed, but never destroyed, shining through the centuries, reinterpreted by every generation, inexhaustible, never antiquated or obsolete. These principles are the material of philosophy.

This understanding of philosophy is, on the other hand, less modest than the attempt to reduce philosophy to epistemology and ethics, which was the goal of the Neo-Kantian and related schools in the nineteenth century, and less modest also than the attempt to reduce it to logical calculus, which has been the goal of logical positivism and related schools in the twentieth century. Both attempts to avoid the ontological question have been unsuccessful. The later adherents of the Neo-Kantian philosophy recognized that every epistemology contains an implicit ontology. It cannot be otherwise. Since knowing is an act which participates in being or, more precisely, in an "ontic relation," every analysis of the act of knowing must refer to an interpretation of being (cf. Nicolai Hartmann). At the same time the problem of values pointed toward an ontological foundation of the validity of value-judgments. If values have no *fundamentum in re* (cf. Plato's identification of the good with the essential structures, the ideas of being), they float in the air of a transcendent validity, or else they are subjected to pragmatic tests which are arbitrary and accidental unless they introduce an ontology of essences surreptitiously. It is not necessary to discuss the pragmatic-naturalistic line of philosophical thought, for, in spite of the anti-metaphysical statements of some of its adherents, it has expressed itself in definite ontological terms such as life, growth, process, experience, being (understood in an all-embracing sense), etc. But it is necessary to compare the ontological definition of philosophy, suggested above, with the radical attempts to reduce philosophy to scientific logic. The question is whether the elimination of almost all traditional philosophical problems by logical positivism is a successful escape from ontology. One's first reaction is the feeling that such an attitude pays too high a price, namely, the price of making philosophy irrelevant. But beyond this impression, the following argument can be put forward. If the restriction of philosophy to the logic of the sciences is a matter of taste, it need not be taken seriously. If it is based on an analysis of the limits of human knowledge, it is based, like

every epistemology, on ontological assumptions. There is always at least one problem about which logical positivism, like all semantic philosophies, must make a decision. What is the relation of signs, symbols, or logical operations to reality? Every answer to this question says something about the structure of being. It is ontological. And a philosophy which is so radically critical of all other philosophies should be sufficiently self-critical to see and to reveal its own ontological assumptions.

Philosophy asks the question of reality as a whole; it asks the question of the structures of being. And it answers in terms of categories, structural laws, and universal concepts. It must answer in ontological terms. Ontology is not a speculative-fantastic attempt to establish a world behind the world; it is an analysis of those structures of being which we encounter in every meeting with reality. This was also the original meaning of metaphysics; but the preposition *meta* now has the irremediable connotation of pointing to a duplication of this world by a transcendent realm of beings. Therefore, it is perhaps less misleading to speak of ontology instead of metaphysics.

Philosophy necessarily asks the question of reality as a whole, the question of the structure of being. Theology necessarily asks the same question, for that which concerns us ultimately must belong to reality as a whole; it must belong to being. Otherwise we could not encounter it, and it could not concern us. Of course, it cannot be one being among others; then it would not concern us infinitely. It must be the ground of our being, that which determines our being or non-being, the ultimate and unconditional power of being. But the power of being, its infinite ground or "being-itself," expresses itself in and through the structure of being. Therefore, we can encounter it, be grasped by it, know it, and act toward it. Theology, when dealing with our ultimate concern, presupposes in every sentence the structure of being, its categories, laws and concepts. Theology, therefore, cannot escape the question of being any more easily than can philosophy. The attempt of biblicism to avoid non-biblical, ontological terms is doomed to failure as surely as are the corresponding philosophical attempts. The Bible itself always uses the categories and concepts which describe the structure of experience. On every page of every religious or theological text these concepts appear: time, space, cause, thing, subject, nature, movement, freedom, necessity, life, value, knowledge, experience, being and non-being. Biblicism may try to preserve their popular meaning, but then it ceases to be theology. It must neglect the fact that a philosophical understanding of these categories has influenced ordinary language for many centuries. It is surprising how casually theological biblicists use a term like "history" when speaking of Christianity as a historical religion or of God as the "Lord of history." They forget that the meaning they connect with the word "history" has been formed by thousands of years of historiography and philosophy of history. They forget that historical being is one kind of being in addition to others and that, in order to distinguish it from the word "nature," for in-

stance, a general vision of the structure of being is presupposed. They forget that the problem of history is tied up with the problems of time, freedom, accident, purpose, etc., and that each of these concepts has had a development similar to the concept of history. The theologian must take seriously the meaning of the terms he uses. They must be known to him in the whole depth and breadth of their meaning. Therefore, the systematic theologian must be a philosopher in critical understanding even if not in creative power.

The structure of being and the categories and concepts describing this structure are an implicit or explicit concern of every philosopher and of every theologian. Neither of them can avoid the ontological question. Attempts from both sides to avoid it have proved abortive. If this is the situation, the question becomes the more urgent: What is the relation between the ontological question asked by the philosopher and the ontological question asked by the theologian?

¶ *Theology and Philosophy: An Answer*

Philosophy and theology ask the question of being. But they ask it from different perspectives. Philosophy deals with the structure of being in itself; theology deals with the meaning of being for us. From this difference convergent and divergent trends emerge in the relation of theology and philosophy.

The first point of divergence is a difference in the cognitive attitude of the philosopher and the theologian. Although driven by the philosophical *erōs*, the philosopher tries to maintain a detached objectivity toward being and its structures. He tries to exclude the personal, social, and historical conditions which might distort an objective vision of reality. His passion is the passion for a truth which is open to general approach, subject to general criticism, changeable in accordance with every new insight, open and communicable. In all these respects he feels no different from the scientist, historian, psychologist, and so forth. He collaborates with them. The material for his critical analysis is largely supplied by empirical research. Just as all sciences have their origin in philosophy, so they contribute in turn to philosophy by giving to the philosopher new and exactly defined material far beyond anything he could get from a pre-scientific approach to reality. Of course, the philosopher, as a philosopher, neither criticises nor augments the knowledge provided by the sciences. This knowledge forms the basis of his description of the categories, structural laws, and concepts which constitute the structure of being. In this respect the philosopher is as dependent on the scientist as he is dependent on his own pre-scientific observation of reality—often more dependent. This relation to the sciences (in the broad sense of *Wissenschaften*) strengthens the detached, objective attitude of the

philosopher. Even in the intuitive-synthetic side of his procedure he tries to exclude influences which are not purely determined by his object.³

The theologian, quite differently, is not detached from his object but is involved in it. He looks at his object (which transcends the character of being an object) with passion, fear, and love. This is not the *erōs* of the philosopher or his passion for objective truth; it is the love which accepts saving, and therefore personal, truth. The basic attitude of the theologian is commitment to the content he expounds. Detachment would be a denial of the very nature of this content. The attitude of the theologian is "existential." He is involved—with the whole of his existence, with his finitude and his anxiety, with his self-contradictions and his despair, with the healing forces in him and in his social situation. Every theological statement derives its seriousness from these elements of existence. The theologian, in short, is determined by his faith. Every theology presupposes that the theologian is in the theological circle. This contradicts the open, infinite, and changeable character of philosophical truth. It also differs from the way in which the philosopher is dependent on scientific research. The theologian has no direct relation to the scientist (including the historian, sociologist, psychologist). He deals with him only in so far as philosophical implications are at stake. If he abandons the existential attitude, as some of the "empirical" theologians have done, he is driven to statements the reality of which will not be acknowledged by anybody who does not share the existential presuppositions of the assumedly empirical theologian. Theology is necessarily existential, and no theology can escape the theological circle.

The second point of divergence between the theologian and the philosopher is the difference in their sources. The philosopher looks at the whole of reality to discover within it the structure of reality as a whole. He tries to penetrate into the structures of being by means of the power of his cognitive function and its structures. He assumes—and science continuously confirms this assumption—that there is an identity, or at least an analogy, between objective and subjective reason, between the *logos* of reality as a whole and the *logos* working in him. Therefore, this *logos* is common; every reasonable being participates in it, uses it in asking questions and criticising the answers received. There is no particular place to discover the categories of experience. The place to look is all places; the place to stand is no place at all; it is pure reason.

The theologian, on the other hand, must look where that which concerns him ultimately is manifest, and he must stand where its manifestation reaches and grasps him. The source of his knowledge is not the universal *logos* but the Logos "who became flesh," that is, the *logos* manifesting itself in a particular historical event. And the medium through

3. The concept of a "philosophical faith" appears questionable from this point of view (see Karl Jaspers, *The Perennial Scope of Philosophy* [New York: Philosophical Library, 1949]).

which he receives the manifestation of the *logos* is not common rationality but the church, its traditions, and its present reality. He speaks in the church about the foundation of the church. And he speaks because he is grasped by the power of this foundation and by the community built upon it. The concrete *logos* which he sees is received through believing commitment and not, like the universal *logos* at which the philosopher looks, through rational detachment.

The third point of divergence between philosophy and theology is the difference in their content. Even when they speak about the same object they speak about something different. The philosopher deals with the categories of being in relation to the material which is structured by them. He deals with causality as it appears in physics or psychology; he analyses biological or historical time; he discusses astronomical as well as micro-cosmic space. He describes the epistemological subject and the relation of person and community. He presents the characteristics of life and spirit in their dependence on, and independence of, each other. He defines nature and history in their mutual limits and tries to penetrate into ontology and logic of being and non-being. Innumerable other examples could be given. They all reflect the cosmological structure of the philosophical assertions. The theologian, on the other hand, relates the same categories and concepts to the quest for a "new being." His assertions have a soteriological character. He discusses causality in relation to a *prima causa*, the ground of the whole series of causes and effects; he deals with time in relation to eternity, with space in relation to man's existential homelessness. He speaks of the self-estrangement of the subject, about the spiritual centre of personal life, and about community as a possible embodiment of the "New Being." He relates the structures of life to the creative ground of life and the structures of spirit to the divine Spirit. He speaks of the participation of nature in the "history of salvation," about the victory of being over non-being. Here also the examples could be increased indefinitely; they show the sharp divergence of theology from philosophy with respect to their content.

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CHAPTER II: THE METHOD AND STRUCTURE OF SYSTEMATIC THEOLOGY

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¶ *The Method of Correlation*

The principle of methodological rationality implies that, like all scientific approaches to reality, systematic theology follows a method. A method is a tool, literally a way around, which must be adequate to its subject matter.

Whether or not a method is adequate cannot be decided *a priori*; it is continually being decided in the cognitive process itself. Method and system determine each other. Therefore, no method can claim to be adequate for every subject. Methodological imperialism is as dangerous as political imperialism; like the latter, it breaks down when the independent elements of reality revolt against it. A method is not an "indifferent net" in which reality is caught, but the method is an element of the reality itself. In at least one respect the description of a method is a description of a decisive aspect of the object to which it is applied. The cognitive relation itself, quite apart from any special act of cognition, reveals something about the object, as well as about the subject, in the relation. The cognitive relation in physics reveals the mathematical character of objects in space (and time). The cognitive relation in biology reveals the structure (*Gestalt*) and spontaneous character of objects in space and time. The cognitive relation in historiography reveals the individual and value-related character of objects in time (and space). The cognitive relation in theology reveals the existential and transcending character of the ground of objects in time and space. Therefore, no method can be developed without a prior knowledge of the object to which it is applied. For systematic theology this means that its method is derived from a prior knowledge of the system which is to be built by the method.

Systematic theology uses the method of correlation. It has always done so, sometimes more, sometimes less, consciously, and must do so consciously and outspokenly, especially if the apologetic point of view is to prevail. The method of correlation explains the contents of the Christian faith through existential questions and theological answers in mutual interdependence.

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The divine-human relationship is a correlation also on its cognitive side. Symbolically speaking, God answers man's questions, and under the impact of God's answers man asks them. Theology formulates the questions implied in human existence, and theology formulates the answers implied in divine self-manifestation under the guidance of the questions implied in human existence. This is a circle which drives man to a point where question and answer are not separated. This point, however, is not a moment in time. It belongs to man's essential being, to the unity of his finitude with the infinity in which he was created and from which he is separated. A symptom of both the essential unity and the existential separation of finite man from his infinity is his ability to ask about the infinite to which he belongs: the fact that he must ask about it indicates that he is separated from it.

The answers implied in the event of revelation are meaningful only in so far as they are in correlation with questions concerning the whole of our existence, with existential questions. Only those who have experienced

the shock of transitoriness, the anxiety in which they are aware of their finitude, the threat of non-being, can understand what the notion of God means. Only those who have experienced the tragic ambiguities of our historical existence and have totally questioned the meaning of existence can understand what the symbol of the Kingdom of God means. Revelation answers questions which have been asked and always will be asked because they are "we ourselves." Man is the question he asks about himself, before any question has been formulated. It is, therefore, not surprising that the basic questions were formulated very early in the history of mankind. Every analysis of the mythological material shows this.⁴ Nor is it surprising that the same questions appear in early childhood, as every observation of children shows. Being human means asking the question of one's own being and living under the impact of the answers given to this question. And, conversely, being human means receiving answers to the questions of one's own being and asking questions under the impact of the answers.

In using the method of correlation, systematic theology proceeds in the following way: it makes an analysis of the human situation out of which the existential questions arise, and it demonstrates that the symbols used in the Christian message are the answers to these questions. The analysis of the human situation is done in terms which today are called "existential." Such analyses are much older than existentialism; they are, indeed, as old as man's thinking about himself, and they have been expressed in various kinds of conceptualisation since the beginning of philosophy. Whenever man has looked at his world he has found himself in it as a part of it. But he also has realised that he is a stranger in the world of objects, unable to penetrate it beyond a certain level of scientific analysis. And then he has become aware of the fact that he himself is the door to the deeper levels of reality, that in his own existence he has the only possible approach to existence itself.⁵ This does not mean that man is more approachable than other objects as material for scientific research. The opposite is the case! It does mean that the immediate experience of one's own existing reveals something of the nature of existence generally. Whoever has penetrated into the nature of his own finitude can find the traces of finitude in everything that exists. And he can ask the question implied in his finitude as the question implied in finitude universally. In doing so he does not formulate a doctrine of man; he expresses a doctrine of existence as experi-

4. Cf. H. Gunkel, *The Legends of Genesis* (Chicago: Open Court Publishing Co., 1901).

5. Cf. Augustine's doctrine of truth dwelling in the soul and transcending it at the same time; the mystical identification of the ground of being with the ground of self; the use of psychological categories for ontological purposes in Paracelsus, Bohme, Schelling, and in the "philosophy of life" from Schopenhauer, to Bergson; Heidegger's notion of *Dasein* (being there) as the form of human existence and the entrance to ontology.

enced in him as man. When Calvin in the opening sentences of the *Institutes* correlates our knowledge of God with our knowledge of man, he does not speak of the doctrine of man as such and of the doctrine of God as such. He speaks of man's misery, which gives the existential basis for his understanding of God's glory, and of God's glory, which gives the essential basis for man's understanding of his misery. Man as existing, representing existence generally and asking the question implied in his existence, is one side of the cognitive correlation to which Calvin points, the other side being the divine majesty. In the initial sentences of his theological system Calvin expresses the essence of the method of correlation.⁶

The analysis of the human situation employs materials made available by man's creative self-interpretation in all realms of culture. Philosophy contributes, but so do poetry, drama, the novel, therapeutic psychology, and sociology. The theologian organises these materials in relation to the answer given by the Christian message. In the light of this message he may make an analysis of existence which is more penetrating than that of most philosophers. Nevertheless, it remains a philosophical analysis. The analysis of existence, including the development of the questions implicit in existence, is a philosophical task, even if it is performed by a theologian, and even if the theologian is a reformer like Calvin. The difference between the philosopher in analysing human existence is only that the former tries to give an analysis which will be part of a broader philosophical work, while the latter tries to correlate the material of his analysis with the theological concepts he derives from the Christian faith. This does not make the philosophical work of the theologian heteronomous. As a theologian he does not tell himself what is philosophically true. As a philosopher he does not tell himself what is theologically true. But he cannot help seeing human existence and existence generally in such a way that the Christian symbols appear meaningful and understandable to him. His eyes are partially focused by his ultimate concern, which is true of every philosopher. Nevertheless, his act of seeing is autonomous, for it is determined only by the object as it is given in his experience. If he sees something he did not expect to see in the light of his theological answer, he holds fast to what he has seen and reformulates the theological answer. He is certain that nothing he sees can change the substance of his answer, because this substance is the *logos* of being, manifest in Jesus as the Christ. If this were not his presupposition, he would have to sacrifice either his philosophical honesty or his theological concern.

The Christian message provides the answers to the questions implied in human existence. These answers are contained in the revelatory events

6. "The knowledge of ourselves is not only an incitement to seek after God, but likewise a considerable assistance towards finding him. On the other hand, it is plain that no man can arrive at the true knowledge of himself, without having first contemplated the divine character, and then descended to the consideration of his own" (John Calvin, *Institutes*. I, 48).

on which Christianity is based and are taken by systematic theology *from* the sources, *through* the medium, *under* the norm. Their content cannot be derived from the questions, that is, from an analysis of human existence. They are "spoken" to human existence from beyond it. Otherwise they would not be answers, for the question is human existence itself. But the relation is more involved than this, since it is correlation. There is a mutual dependence between question and answer. In respect to content the Christian answers are dependent on the revelatory events in which they appear; in respect to form they are dependent on the structure of the questions which they answer. God is the answer to the question implied in human finitude. This answer cannot be derived from the analysis of existence. However, if the notion of God appears in systematic theology in correlation with the threat of non-being which is implied in existence, God must be called the infinite power of being which resists the threat of non-being. In classical theology this is being-itself. If anxiety is defined as the awareness of being finite, God must be called the infinite ground of courage. In classical theology this is universal providence. If the notion of the Kingdom of God appears in correlation with the riddle of our historical existence, it must be called the meaning, fulfilment, and unity of history. In this way an interpretation of the traditional symbols of Christianity is achieved which preserves the power of these symbols and which opens them to the questions elaborated by our present analysis of human existence.

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CHAPTER IX: THE MEANING OF "GOD"

¶ *A Phenomenological Description*

(a) *God and man's ultimate concern.* "God" is the answer to the question implied in man's finitude; he is the name for that which concerns man ultimately. This does not mean that first there is a being called God and then the demand that man should be ultimately concerned about him. It means that whatever concerns a man ultimately becomes god for him, and, conversely, it means that a man can be concerned ultimately only about that which is god for him. The phrase "being ultimately concerned" points to a tension in human experience. On the one hand, it is impossible to be concerned about something which cannot be encountered concretely, be it in the realm of reality or in the realm of imagination. Universals can become matters of ultimate concern only through their power of representing concrete experiences. The more concrete a thing is, the more the possible concern about it. The completely concrete being, the individual person, is the object of the most radical concern—the concern of love. On the other hand, ultimate concern must transcend every preliminary finite

and concrete concern. It must transcend the whole realm of finitude in order to be the answer to the question implied in finitude. But in transcending the finite the religious concern loses the concreteness of a being-to-being relationship. It tends to become not only absolute but also abstract, provoking reactions from the concrete element. This is the inescapable inner tension in the idea of God. The conflict between the concreteness and the ultimacy of the religious concern is actual wherever God is experienced and this experience is expressed, from primitive prayer to the most elaborate theological system. It is the key to understanding the dynamics of the history of religion, and it is the basic problem of every doctrine of God, from the earliest priestly wisdom to the most refined discussions of the trinitarian dogma.

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(b) *God and the idea of the holy*. The sphere of the gods is the sphere of holiness. A sacred realm is established wherever the divine is manifest. Whatever is brought into the divine sphere is consecrated. The divine is the holy.

Holiness is an experienced phenomenon; it is open to phenomenological description. Therefore, it is a very important cognitive "doorway" to understanding the nature of religion, for it is the most adequate basis we have for understanding the divine. The holy and the divine must be interpreted correlatively. A doctrine of God which does not include the category of holiness is not only unholy but also untrue. Such a doctrine transforms the gods into secular objects whose existence is rightly denied by naturalism. On the other hand, a doctrine of the holy which does not interpret it as the sphere of the divine transforms the holy into something aesthetic-emotional, which is the danger of theologies like those of Schleiermacher and Rudolf Otto. Both mistakes can be avoided in a doctrine of God which analyses the meaning of ultimate concern and which derives from it both the meaning of God and the meaning of the holy.

The holy is the *quality* of that which concerns man ultimately. Only that which is holy can give man ultimate concern, and only that which gives man ultimate concern has the quality of holiness.

The phenomenological description of the holy in Rudolf Otto's classical book *The Idea of the Holy* demonstrates the interdependence of the meaning of the holy and the meaning of the divine, and it demonstrates their common dependence on the nature of ultimate concern. When Otto calls the experience of the holy "numinous," he interprets the holy as the presence of the divine. When he points to the mysterious character of holiness, he indicates that the holy transcends the subject-object structure of reality. When he describes the mystery of the holy as *tremendum* and *fascinosum*, he expresses the experience of "the ultimate" in the double sense of that which is the abyss and that which is the ground of man's being. This is not directly asserted in Otto's merely phenomenological analysis, which, by

the way, never should be called "psychological." However, it is implicit in his analysis, and it should be made explicit beyond Otto's own intention.

Such a concept of the holy opens large sections of the history of religion to theological understanding, by explaining the ambiguity of the concept of holiness at every religious level. Holiness cannot become actual except through holy "objects." But holy objects are not holy in and of themselves. They are holy only by negating themselves in pointing to the divine of which they are the mediums. If they establish themselves as holy, they become demonic. They still are "holy," but their holiness is anti-divine. A nation which looks upon itself as holy is correct in so far as everything can become a vehicle of man's ultimate concern, but the nation is incorrect in so far as it considers itself to be inherently holy. Innumerable things, all things in a way, have the power of becoming holy in a mediate sense. They can point to something beyond themselves. But, if their holiness comes to be considered inherent, it becomes demonic. This happens continually in the actual life of most religions. The representations of man's ultimate concern—holy objects—tend to become his ultimate concern. They are transformed into idols. Holiness provokes idolatry.

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CHAPTER X: THE ACTUALITY OF GOD: GOD AS BEING AND LIVING

(a) *God as being and finite being.* The being of God is being-itself. The being of God cannot be understood as the existence of a being alongside others or above others. If God is a being, he is subject to the categories of finitude, especially to space and substance. Even if he is called the "highest being" in the sense of the "most perfect" and the "most powerful" being, this situation is not changed. When applied to God, superlatives become diminutives. They place him on the level of other beings while elevating him above all of them. Many theologians who have used the term "highest being" have known better. Actually they have described the highest as the absolute, as that which is on a level qualitatively different from the level of any being—even the highest being. Whenever infinite or unconditional power and meaning are attributed to the highest being, it has ceased to be a being and has become being-itself. Many confusions in the doctrine of God and many apologetic weaknesses could be avoided if God were understood first of all as being-itself or as the ground of being. The power of being is another way of expressing the same thing in a circumscribing phrase. Ever since the time of Plato it has been known—although it often has been disregarded, especially by the nominalists and their modern followers—that the concept of being as being, or being-itself, points to the power inherent in everything, the power of resisting non-being. Therefore, in-

stead of saying that God is first of all being-itself, it is possible to say that he is the power of being in everything and above everything, the infinite power of being. A theology which does not dare to identify God and the power of being as the first step toward a doctrine of God relapses into monarchic monotheism, for if God is not being-itself he is subordinate to it, just as Zeus is subordinate to fate in Greek religion. The structure of being-itself is his fate, as it is the fate of all other beings. But God is his own fate; he is "by himself"; he possesses "aseity." This can be said of him only if he is the power of being, if he is being-itself.

As being-itself God is beyond the contrast of essential and existential being. We have spoken of the transition of being into existence, which involves the possibility that being will contradict and lose itself. This transition is excluded from being-itself (except in terms of the Christological paradox), for being-itself does not participate in non-being. In this it stands in contrast to every being. As classical theology has emphasised, God is beyond essence and existence. Logically, being-itself is "before," "prior to," the split which characterises finite being.

For this reason it is as wrong to speak of God as the universal essence as it is to speak of him as existing. If God is understood as universal essence, as the form of all forms, he is identified with the unity and totality of finite potentialities; but he has ceased to be the power of the ground in all of them, and therefore he has ceased to transcend them. He has poured all his creative power into a system of forms, and he is bound to these forms. This is what pantheism means.

On the other hand, grave difficulties attend the attempt to speak of God as existing. In order to maintain the truth that God is beyond essence and existence while simultaneously arguing for the existence of God, Thomas Aquinas is forced to distinguish between two kinds of divine existence: that which is identical with essence and that which is not. But an existence of God which is not united with its essence is a contradiction in terms. It makes God a being whose existence does not fulfil his essential potentialities; being and not-yet-being are "mixed" in him, as they are in everything finite. God ceases to be God, the ground of being and meaning. What really has happened is that Thomas Aquinas has had to unite two different traditions: the Augustinian, in which the divine existence is included in his essence, and the Aristotelian, which derives the existence of God from the existence of the world and which then assents, in a second step, that his existence is identical with his essence. Thus the question of the existence of God can be neither asked nor answered. If asked, it is a question about that which by its very nature is above existence, and therefore the answer—whether negative or affirmative—implicitly denies the nature of God. It is as atheistic to affirm the existence of God as it is to deny it. God is being-itself, not a being. On this basis a first step can be taken toward the solution of the problem which usually is discussed as the immanence and the transcendence of God. As the power of being, God

transcends every being and also the totality of being—the world. Being-itself is beyond finitude and infinity; otherwise it would be conditioned by something other than itself, and the real power of being would lie beyond both it and that which conditioned it. Being-itself infinitely transcends every finite being. There is no proportion or gradation between the finite and the infinite. There is an absolute break, an infinite “jump.” On the other hand, everything finite participates in being-itself and in its infinity. Otherwise it would not have the power of being. It would be swallowed by non-being, or it never would have emerged out of non-being. This double relation of all beings to being-itself gives being-itself a double characteristic. In calling it creative we point to the fact that everything participates in the infinite power of being. In calling it abysmal we point to the fact that everything participates in the power of being in a finite way, that all beings are infinitely transcended by their creative ground.

Since God is the ground of being, he is the ground of the structure of being. He is not subject to this structure; the structure is grounded in him. He is this structure, and it is impossible to speak about him except in terms of this structure. God must be approached cognitively through the structural elements of being-itself. These elements make him a living God, a God who can be man's concrete concern. They enable us to use symbols which we are certain point to the ground of reality.

(b) *God as being and the knowledge of God.* The statement that God is being-itself is a non-symbolic statement. It does not point beyond itself. It means what it says directly and properly; if we speak of the actuality of God we first assert that he is not God if he is not being-itself. Other assertions about God can be made theologically only on this basis. Of course, religious assertions do not require such a foundation for what they say about God; the foundation is implicit in every religious thought concerning God. Theologians must make explicit what is implicit in religious thought and expression; and, in order to do this, they must begin with the most abstract and completely unsymbolic statement which is possible, namely, that God is being-itself or the absolute.

However, after this has been said, nothing else can be said about God as God which is not symbolic. As we already have seen, God as being-itself is the ground of the ontological structure of being without being subject to this structure himself. He is the structure; that is, he has the power of determining the structure of everything that has being. Therefore, if anything beyond this bare assertion is said about God, it no longer is a direct and proper statement, no longer a concept. It is indirect, and it points to something beyond itself. In a word, it is symbolic.

The general character of the symbol has been described. Special emphasis must be laid on the insight that symbol and sign are different; that, while the sign bears no necessary relation to that to which it points, the symbol participates in the reality of that for which it stands. The sign can be changed arbitrarily according to the demands of expediency, but the symbol

grows and dies according to the correlation between that which is symbolised and the persons who receive it as a symbol. Therefore, the religious symbol, the symbol which points to the divine, can be a true symbol only if it participates in the power of the divine to which it points.

There can be no doubt that any concrete assertion about God must be symbolic, for a concrete assertion is one which uses a segment of finite experience in order to say something about him. It transcends the content of this segment, although it also includes it. The segment of finite reality which becomes the vehicle of a concrete assertion about God is affirmed and negated at the same time. It becomes a symbol, for a symbolic expression is one whose proper meaning is negated by that to which it points. And yet it also is affirmed by it, and this affirmation gives the symbolic expression an adequate basis for pointing beyond itself.

The crucial question must now be faced. Can a segment of finite reality become the basis for an assertion about that which is infinite? The answer is that it can, because that which is infinite is being-itself and because everything participates in being-itself. The *analogia entis* is not the property of a questionable natural theology which attempts to gain knowledge of God by drawing conclusions about the infinite from the finite. The *analogia entis* gives us our only justification of speaking at all about God. It is based on the fact that God must be understood as being-itself.

The truth of a religious symbol has nothing to do with the truth of the empirical assertions involved in it, be they physical, psychological, or historical. A religious symbol possesses some truth if it adequately expresses the correlation of revelation in which some person stands. A religious symbol *is* true if it adequately expresses the correlation of some person with final revelation. A religious symbol can die only if the correlation of which it is an adequate expression dies. This occurs whenever the revelatory situation changes and former symbols become obsolete. The history of religion, right up to our own time, is full of dead symbols which have been killed not by a scientific criticism of assumed superstitions but by a religious criticism of religion. The judgment that a religious symbol *is* true is identical with the judgment that the revelation of which it is the adequate expression is true. This double meaning of the truth of a symbol must be kept in mind. A symbol *has* truth: it is adequate to the revelation it expresses. A symbol *is* true: it is the expression of a true revelation.

Theology as such has neither the duty nor the power to confirm or to negate religious symbols. Its task is to interpret them according to theological principles and methods. In the process of interpretation, however, two things may happen: theology may discover contradictions between symbols within the theological circle and theology may speak not only as theology but also as religion. In the first case, theology can point out the religious dangers and the theological errors which follow from the use of certain

symbols; in the second case, theology can become prophecy, and in this role it may contribute to a change in the revelatory situation.

Religious symbols are double-edged. They are directed toward the infinite which they symbolise *and* toward the finite through which they symbolise it. They force the infinite down to finitude and the finite up to infinity. They open the divine for the human and the human for the divine. For instance, if God is symbolised as "Father," he is brought down to the human relationship of father and child. But at the same time this human relationship is consecrated into a pattern of the divine-human relationship. If "Father" is employed as a symbol for God, fatherhood is seen in its theonomous, sacramental depth. One cannot arbitrarily "make" a religious symbol out of a segment of secular reality. Not even the collective unconscious, the great symbol-creating source, can do this. If a segment of reality is used as a symbol for God, the realm of reality from which it is taken is, so to speak, elevated into the realm of the holy. It no longer is secular. It is theonomous. If God is called the "king," something is said not only about God but also the holy character of kingship. If God's work is called making whole" or "healing," this not only says something about God but also emphasises the theonomous character of all healing. If God's self-manifestation is called "the word," this not only symbolises God's relation to man but also emphasises the holiness of all words as an expression of the spirit. The list could be continued. Therefore, it is not surprising that in a secular culture both the symbols for God and the theonomous character of the material from which the symbols are taken disappear.

A final word of warning must be added in view of the fact that for many people the very term "symbolic" carries the connotation of non-real. This is partially the result of confusion between sign and symbol and partially due to the identification of reality with empirical reality, with the entire realm of objective things and events. Both reasons have been undermined explicitly and implicitly in the foregoing chapters. But one reason remains, namely, the fact that some theological movements, such as Protestant Hegelianism and Catholic modernism, have interpreted religious language symbolically in order to dissolve its realistic meaning and to weaken its seriousness, its power, and its spiritual impact. This was not the purpose of the classical essays on the "divine names," in which the symbolic character of all affirmations about God was strongly emphasised and explained in religious terms, nor was it a consequence of these essays. Their intention and their result was to give to God and to all his relations with man more reality and power than a non-symbolic and therefore easily superstitious interpretation could give them. In this sense symbolic interpretation is proper and necessary; it enhances rather than diminishes the reality and power of religious language, and in so doing it performs an important function.

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part

XIII

JEAN-PAUL SARTRE

1905—

Introduction

Sartre is an intellectual in the French tradition of the Enlightenment. He is a philosopher, psychologist, playwright and novelist, and he practices these skills with a master's touch. What is more, these diverse intellectual activities are all of a piece, the philosophy being the central organizing principle. Sartre is also a man of deep moral and political convictions, and true to his native intellectual tradition he is strongly committed to action commensurate with his beliefs. Whatever one may think of the wisdom of Sartre's consistent support of movements that are against the *status quo*, no one can accuse him of insincerity or evasion.

If being an intellectual in a generic sense—a sense that cuts across nationality and tradition—involves rebelling thoughtfully against the prejudices of one's society, then the whole Sartre's life bears witness to the fact that he is an intellectual in this sense too.

Sartre fought the Germans first as a French soldier and then as one of the leaders of the French Resistance. He and Camus, another great Frenchman of our time, were comrades-in-arms. They were not in agreement on all things. In fact, they had severed relations some time before the tragic death of Camus in 1960. But one of the most moving and genuinely felt tributes to Camus after his death was written by Sartre in *The Reporter* magazine of February 4, 1960.

Although never himself a Communist, Sartre has preached the doctrine that men of good will every-

where should support Communist aims on the grounds that the Communists are the only force working for the overthrow of the *status quo*. For this Sartre has been vilified. But, if there is any fault in his political platform, it is not the fault of cowardice or opportunism. He knows, and has said, that his like would be among the first to lose their heads following Communist victory.

In France, existentialism takes two main and fundamentally opposed directions. The fundamental opposition is religious. Gabriel Marcel, like Maritain a convert to Catholicism, typifies the Catholic wing of French existentialism. Sartre is the leader of the atheistic branch. He believes that the idea of God in the Western theistic tradition is self-contradictory. Besides, he is convinced that religion is morally evil. He is, therefore, as militant an atheist as he is a leftist. He is passionate and principled in both, and in our day these are rare virtues.

Sartre, like Heidegger, is a system-builder in the tradition of Hegel. His philosophy, however, suffers from serious defects. When not downright inconsistent, he is incomprehensible and frequently his arguments are based on puns and ambiguities. His chief value as a philosopher lies more in his criticisms of others than in his own contributions. The chapter on Bad Faith from *Being and Nothingness*, which we have included here, is a good example of this. Sartre is also interesting when concrete illustrations are called for. Because he is a literary craftsman and a perceptive lay psychologist, his illustrations are marvelously illuminating.

In 1946 Sartre published "L'Existentialisme est une humanisme," an essay in which he tries to give a popular account of existentialism specifically with a view to defending it against certain "misconceptions," such as that it is a form of nihilism, defeatism, irrationalism, and the like. The essay was translated into English in 1947, under the title *Existentialism*.¹ Sartre's chief work is *L'être et le néant*, which was translated into English under the title *Being and Nothingness*.² In the essay Sartre deals mainly with two issues and treats them as being systematically connected. One is the metaphysics of essence and existence. The other is man's moral predicament. Together they lead to one inconsistency and one anomaly, and the anomaly comes close to being a logical paradox. These consequences show that the theory being sketched is radically in need of revision. Unfortunately, the fuller elaboration of these and related topics in *Being and Nothingness* shows that the difficulties of the popular essay cannot be explained as being the result of hasty popularizing.

In the essay Sartre defines existentialism as the view that existence precedes essence. Heidegger correctly points out in his "Letter on Humanism" that Sartre is using the words "essence" and "existence" in their traditional metaphysical sense of *essentia* (nature, essential characteristic) and *existentia* (concrete presence in the spatio-temporal world). Sartre says that the principle of existentialism is true only of man. It is only in man's case that existence precedes essence. And the reason for this is as follows. There is no God. Therefore, there is no plan according to which man is fashioned. Because there is no such plan or conception prior to man's existence, there is no such thing as a human essence. Now, apart from the fact that the premises are begging all sorts of issues (for example, Sartre is here assuming that an essence can be nothing other than a consciously entertained conception, as if Plato had never written about his realm of essence!), Sartre's conclusion that there is no human essence is inconsistent

with his conclusion that every man, in being "condemned to be free," is in anguish; and only man is in anguish. The inconsistency is in denying that man has an essence and asserting that anguish is common and peculiar to man insofar as he is a man. For the traditional conception of *essentia* is nothing more or less than that which is necessarily common and peculiar to a kind.

The conclusion about anguish derives from Sartre's analysis of man's moral predicament. Because there is no God, there are no standards of good and bad, right and wrong by which we can assess the evaluations that we are condemned to make freely. Man's freedom consists in the fact that whatever he becomes he chooses to become. There is no antecedently determining condition limiting man's freedom. If he concludes that determinism is true, he *chooses* so to conclude. He chooses to accept the premise from which he derives the deterministic conclusion. He chooses to use the rules of inference that lead him to his conclusion. But, in his inescapable freedom from all previously determining conditions, in the inevitability of his making choices and in the fact that to make a choice is to make it as a choice valid for all men, lie the roots of his anguish. For how can a sensitive man fail to be aware of his awful responsibility, the responsibility of making choices which, Sartre believes, are by their very nature meant to be binding on all men, when *his making the choice* and nothing else invests the choice with authority? The anomaly is this: if there are no standards of evaluation *in the light of which* my own choices can be assessed; in other words, if good and bad, right and wrong are *made by me* as a freely choosing agent, why should I feel anguish? Moral anguish, the haunting sense of the possibility that one may have made a morally wrong choice, can make sense only if there are standards distinct from our choosings. Otherwise it is logically impossible for us to be right or wrong. We can have chosen in a manner to be regretted, but never rightly or wrongly. But this leaves no room for moral anguish.

In *Being and Nothingness* Sartre's theory of human freedom is rooted in his conception of nothingness. This attempts to provide a philosophically more fundamental account of freedom, but it fares no better than the popular account of the essay. Sartre says that nothingness or non-being reveals itself to us in three ways. First, men ask questions, which shows *lack* of knowledge. This is a way of non-being. This point, however, is not cogent. The *absence* of knowledge may sometimes be regarded as a blameworthy defect. But it surely makes no sense at all to speak of just nothingness as being a blameworthy defect. Second, the answer to a question may be in the negative. But, says Sartre, every negative judgment presupposes non-being: "The necessary condition of our saying *not* is that non-being be a perpetual presence in us and outside of us, that nothingness haunt being." This consideration, however, does not support his conclusion that the non-being presupposed in a negative judgment is being nothing at all. Plato dealt with this issue in the *Sophist* where he pointed out that a thing's not being this or that does not presuppose nothingness but only otherness. Third, the answer to a question must be true. But truth is non-being because it is not identical with being. Truth presupposes differentiation, whereas being is an undifferentiated whole. But, again, Sartre is unconvincing. The fact that truth is other than being does not mean that truth is nothing at all.

This nothing at all, this nothingness Sartre identifies with consciousness or

human reality. He seems to be arguing that non-being cannot come from being nor can it come from itself. This part of the argument is extremely difficult to understand. The important thing, however, is to see that for Sartre nothingness and human reality are one and the same. Now, says Sartre, in order for man to be nothingness he must be free. Man *is* the ability to say "no." Sartre does not say that man *has* the ability to negate, for that might suggest that man is something in-itself (*en-soi*), like a table or a chair. Man is not an in-itself, not a thing or substance or process. Man is for-itself (*pour-soi*), a consciousness, an ability-to-be-aware of himself and to be distinct from everything he can be conscious of. This doctrine of man as nothingness is contrary to common sense. How can nothingness literally be capable of self-consciousness and consciousness of things that are *en-soi*. Perhaps Sartre made a slip here, but it is not easy to find textual evidence to support an interpretation that would accord with common sense. Possibly this doctrine of man is Sartre's way of reformulating the doctrine of the transcendental ego, such as Kant and Husserl hint at. If this guess is right, there is still a marked difference, because although Kant and Husserl claim that the transcendental ego is not an entity that can be described or found in experience, still it is not nothing.

Man, says Sartre, is radically free in being free of determination (1) by the passions (2) by motives (3) by things, substances, processes (the in-itself) (4) by his own nature or essence, and, finally (5) man is free of antecedently fixed standards. We are free from passions because man is a nothing at all, a "hole in being" and therefore the passions can never get hold of him. For this same reason, man is free from motives in the sense of psychological pushes and pulls, appetites and aversions. Man is also free of motives in the sense of reasons for doing this or that. This is basically so because all reasoning presupposes canons and assumptions, and there is no reason for choosing one canon over another, or one premise over another. Ultimately, I simply choose to start here rather than there. Thus, deliberation itself depends upon choices that are subject to no restrictions not of our own choosing. And again, because man is "a hole in being," the in-itself cannot causally determine him because things and processes and substances cannot act on anything that is not there to be gotten hold of. Man is free of his essence for the simple reason that he has no essence. In man existence precedes essence, and each individual makes himself (once he exists) according to his own choices. Thus there is not even any guarantee that, once they exist, individuals will make themselves into essentially like entities. Finally, man is free of antecedently determined standards because in the absence of decision or choice by men nothing is a standard. So man makes up his own standards as he goes along. To put it simply, Sartre's view comes to this: man's evaluations are not only *his*, they are also arbitrary.

Sartre tries to defend himself against the charge of arbitrariness, but he is unsuccessful. In the essay his defense is that man is by his very nature free, and anyone who tries to escape his freedom is deviating from the norm proper to man as man. But there are two difficulties here. First, the answer is inconsistent with the principle that man has no nature. Second, if man is by nature free, then it is impossible for him to evade freedom. (If man is by nature a warm-blooded animal, he cannot make himself cold-blooded, in the biological sense, of course.) But a "norm" that cannot possibly be violated is no norm at all. Sartre's

defense in *Being and Nothingness* is that choices are not arbitrary because every choice is the expression of a primordial choice by which we define our being.³ Consequently, every act can be guided by this primordial choice of myself. This defense against the charge of arbitrariness will not do, either. Suppose that I act not in accordance with my primordial choice. All this means is that I have made a new choice, I have chosen to re-form myself, I have chosen to be a new self. There is no reason for Sartre to say that the first in time of two primordial choices has normative priority over the second. Therefore, it is logically impossible in his system for two fundamental choices to contradict one another. They can only differ and displace one another, and there is no reason for saying that the survivor is superior and ought to serve as the standard for all future actions and choices. In the final analysis, *Being and Nothingness* is no more successful than the essay in showing that man's freedom is his anguish. For Sartre's theory implies that all freedom is arbitrary, but the arbitrariness of choice and action leaves no room for the sort of anguish that Sartre says is man's inescapable condition.

Sartre's account of man as radical freedom involves further difficulties. Science and common sense take it for granted that an immense number of factors limit human freedom. We seem to be limited by physical, biological, psychological, and sociological factors. If Sartre is right, then science and common sense are radically mistaken. What then are Sartre's reasons for denying the reality of these seeming limitations?

Sartre calls "facticity" the class of factors believed to be limitations on human freedom.⁴ Five kinds of facts come under "facticity": my position in space-time, my past, my environment, my fellow men, and my death. Sartre has two arguments to show that facticity is no limitation on absolute freedom. First, he argues that it is our choices themselves that set up their own obstacles. Therefore there are no obstacles or limitations *as such: we choose our own limitations*. For example, if I did not choose to marry that girl, the fiancé who was there before me would be no obstacle. He becomes an obstacle only as I choose to marry the girl. The second argument is as follows: freedom of choice is distinct from freedom of action. The fact that it is impossible for me to marry the girl does not prevent me from choosing to marry her, if I am ignorant of this fact. I am free to choose to marry her, but not free to marry her. ". . . it is necessary to point out to common sense that the formula 'to be free' does not mean 'to obtain what one wishes' but rather 'by oneself to determine oneself to wish' in the broad sense of 'choosing.' The technical and philosophical concept of freedom, the only one which we are considering here, means only the autonomy of choice."⁵

Against the first argument there is this to say. In choosing to marry the girl, I did not choose it to be a fact that there is a fiancé who stands in my way. To this Sartre has an answer. The "facts" of the world are themselves "made" by us, by our choices. Each of us gives to the world the qualities that it has. The answer is not only preposterous but also self-defeating. If Sartre is right, then his view of the world is just an expression of his arbitrary choice. But it follows that his view is no better and no worse than anybody else's. Therefore, if I do not choose to believe in radical freedom, Sartre *cannot* say that I am wrong.

Against the second argument it must be pointed out that "the autonomy of choice" it purports to establish is not enough. If I can choose but am prevented

from accomplishing what I choose, then there is one sense of freedom, freedom of action or accomplishment, with respect to which I am radically limited.⁶

As a systematic ontology Sartre's philosophy is a failure. His value as an intellectual lies in another dimension. If the calling of the intellectual is to be a "gadfly" in the manner of Socrates, then Sartre fulfills his calling admirably, and it is here that his most important contribution is made. Sartre's existentialist philosophy is an attempt to provide underpinning for his powerfully felt moral convictions. Bad faith, responsibility, freedom, choice, anguish—these are the central concerns. In a world in which God is pronounced dead (and Sartre takes this pronouncement in dead earnest), man has to face the usual decisions. He has to take sides as between the Nazis and the Resistance, the middle class and the workers, the "stinkers" and the "authentic" ones. Because he believes that the old religious reasons for being decent are no longer operative, Sartre seeks to provide a substitute for them in a secular ontology. His idea is to provide an "ontological" account of freedom as an explanation and justification of our moral freedom and responsibility. But what he says about freedom, good faith, anguish, and the like, makes sense only if we cut it loose from the "ontological" context in which Sartre sets it and read it simply as a description of modes of human experience. Sartre's view of the human situation is not too different from that of Camus. What they say about man in their literary works is honest and deeply perceptive. But Camus was content to be a moralist without constructing his own ontology. Sartre might have been wiser to have adopted a similar policy.

According to a recent report,⁷ Sartre would probably no longer propose his thesis of radical freedom. It no longer seems valid to him that we are independent of everything. This is a theme of his most recent play, *Les Séquestrés d'Altona*. The hero is a former SS lieutenant, known as the Butcher of Smolensk because of his atrocities against prisoners of war. His father is a German industrialist whom Sartre regards as one of a class responsible for the catastrophe of the Second World War. Since the end of the war, the hero has isolated himself in his room, pondering the enormity of his crimes and trying to find a way to forget. He can neither forget nor find an excuse. He comes to the conclusion that it would have been better if he had never been born. At this point, his old and dying father enters the debate: "It is he, not Franz, who is responsible for the massacres, he who gave Europe its shape and permitted the creation of murderous mechanisms, he who created his soldier-hangman son. Franz asks: 'Then I was predestined?' The father says 'Yes.' Franz asks: 'Predestined to failure?' 'Yes.' 'To crime?' 'Yes.' 'Because of you?' 'Because of my passions.'" Sartre is reported to be working on his autobiography. Perhaps there we will find a definitive statement of his purportedly shifting views on radical freedom.

In June, 1960, Sartre published *Critique de la raison dialectique* (Précédé de question de methode).⁸ This is a new phase in his philosophy. In it Sartre appears to be trying to reconstruct the Hegelian dialectic on the non-Hegelian foundation of subjective consciousness.

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3. *Ibid.*, pp. 464–465.
4. *Ibid.*, p. 481 ff.
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Bad Faith

by **J E A N - P A U L S A R T R E**

I. BAD FAITH AND FALSEHOOD

The human being is not only the being by whom négatités are disclosed in the world; he is also the one who can take negative attitudes with respect to himself. In our Introduction we defined consciousness as "a being, the nature of which is to question its own being, that being implying a being

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other than itself." But now that we have examined the meaning of "the question," we can at present also write the formula thus: "Consciousness is a being, the nature of which is to be conscious of the nothingness of its being." In a prohibition or a veto, for example, the human being denies a future transcendence. But this negation is not verifiable. My consciousness is not restricted to considering a *négarité*. It constitutes itself in its own substance as the annihilation of a possibility which another human reality projects as its possibility. For that reason it must arise in the world as a *Not*; it is as a *Not* that the slave first apprehends the master, or that the prisoner who is trying to escape sees the guard who is watching him. There are even men (e.g., caretakers, overseers, gaolers), whose social reality is uniquely that of the *Not*, who will live and die, having forever been only a *Not* upon the earth. Others, so as to make the *Not* a part of their very subjectivity, establish their human personality as a perpetual negation. This is the meaning and function of what Scheler calls "the man of resentment"—in reality, the *Not*. But there exist more subtle behaviours, the description of which will lead us further into the inwardness of consciousness. Irony is one of these. In irony a man annihilates what he posits within one and the same act; he leads us to believe in order not to be believed; he affirms to deny and denies to affirm; he creates a positive object but it has no being other than its nothingness. Thus attitudes of negation toward the self permit us to raise a new question: What are we to say is the being of man who has the possibility of denying himself? But it is out of the question to discuss the attitude of "self-negation" in its universality. The kinds of behaviour which can be ranked under this heading are too diverse; we risk retaining only the abstract form of them. It is best to choose and to examine one determined attitude which is essential to human reality and which is such that consciousness instead of directing its negation outward turns it toward itself. This attitude, it seems to me, is bad faith (*mauvaise foi*).

Frequently this is identified with falsehood. We say indifferently of a person that he shows signs of bad faith or that he lies to himself. We shall willingly grant that bad faith is a lie to oneself, on condition that we distinguish the lie to oneself from lying in general. Lying is a negative attitude; we will agree to that. But this negation does not bear a consciousness itself; it aims only at the transcendent. The essence of the lie implies in fact that the liar actually is in complete possession of the truth which he is hiding. A man does not lie about what he is ignorant of; he does not lie when he spreads an error of which he himself is the dupe; he does not lie when he is mistaken. The ideal description of the liar would be a cynical consciousness, affirming truth within himself, denying it in his words, and denying that negation as such. Now this doubly negative attitude rests on the transcendent; the fact expressed is transcendent since it does not exist, and the original negation rests on a *truth*; that is, on a particular type of transcendence. As for the inner negation which I effect correlatively with the

affirmation for myself of the truth, this rests on *words*; that is, on an event in the world. Furthermore the inner disposition of the liar is positive; it could be the object of an affirmative judgment. The liar intends to deceive and he does not seek to hide this intention from himself nor to disguise the translucency of consciousness; on the contrary, he has recourse to it when there is a question of deciding secondary behaviour. It explicitly exercises a regulatory control over all attitudes. As for his flaunted intention of telling the truth ("I'd never want to deceive you! This is true! I swear it!")—all this, of course, is the object of an inner negation, but also it is not recognized by the liar as *his* intention. It is played, imitated, it is the intention of the character which he plays in the eyes of his questioner, but this character, precisely because he *does not exist*, is a transcendent. Thus the lie does not put into play the inner structure of present consciousness; all the negations which constitute it bear on objects which by this fact are removed from consciousness. The lie then does not require special ontological foundation, and the explanations which the existence of negation in general requires are valid without change in the case of deceit. Of course we have described the ideal lie; doubtless it happens often enough that the liar is more or less the victim of his lie, that he half persuades himself of it. But these common, popular forms of the lie are also degenerate aspects of it; they represent intermediaries between falsehood and bad faith. The lie is a behaviour of transcendence.

The lie is also a normal phenomenon of what Heidegger calls the *Mit-sein*.¹ It presupposes my existence, the existence of the *other*, my existence *for* the other, and the existence of the other *for* me. Thus there is no difficulty in holding that the liar must make the project of the lie in entire clarity and that he must possess a complete comprehension of the lie and of the truth which he is altering. It is sufficient that an opaqueness of principle hide his intentions from *the other*, it is sufficient that the other can take the lie for truth. By the lie consciousness affirms that it exists by nature as *hidden from the other*; it utilizes for its own profit the ontological duality of myself and myself in the eyes of others.

The situation can not be the same for bad faith if this, as we have said, is indeed a lie to oneself. To be sure, the one who practices bad faith is hiding a displeasing truth or presenting as truth a pleasing untruth. Bad faith then has in appearance the structure of falsehood. Only what changes everything is the fact that in bad faith it is from myself that I am hiding the truth. Thus the duality of the deceiver and the deceived does not exist here. Bad faith on the contrary implies in essence the unity of a *single* consciousness. This does not mean that it can not be conditioned by the *Mit-sein* like all other phenomena of human reality, but the *Mit-sein* can call forth bad faith only by presenting itself as a *situation* which bad faith

1. A "being-with" others in the world. [TRANS.]

permits surpassing; bad faith does not come from outside to human reality. One does not undergo his bad faith; one is not infected with it; it is not a *state*. But consciousness affects itself with bad faith. There must be an original intention and a project of bad faith; this project implies a comprehension of bad faith as such and a prereflective apprehension (of) consciousness as affecting itself with bad faith. It follows first that the one to whom the lie is told and the one who lies are one and the same person, which means that I must know in my capacity as deceiver the truth which is hidden from me in my capacity as the one deceived. Better yet I must know the truth very exactly in *order* to conceal it more carefully—and this not at two different moments, which at a pinch would allow us to re-establish a semblance of duality—but in the unitary structure of a single project. How then can the lie subsist if the duality which conditions it is suppressed?

To this difficulty is added another which is derived from the total translucency of consciousness. That which affects itself with bad faith must be conscious (of) its bad faith since the being of consciousness is consciousness of being. It appears then that I must be in good faith, at least to the extent that I am conscious of my bad faith. But then this whole psychic system is annihilated. We must agree in fact that if I deliberately and cynically attempt to lie to myself, I fail completely in this undertaking; the lie falls back and collapses under my regard; it is ruined *from behind* by the very consciousness of lying to myself which pitilessly constitutes itself well within my project as its very condition. We have here an *evanescent* phenomenon which exists only in and through its own differentiation. To be sure, these phenomena are frequent and we shall see that there is in fact an “evanescence” in bad faith. It is evident that it vacillates continually between good faith and cynicism: Even though the existence of bad faith is very precarious, and though it belongs to the kind of psychic structures which we might call “metastable,”² it presents nonetheless an autonomous and durable form. It can even be the normal aspect of life for a very great number of people. A person can *live* in bad faith, which does not mean that he does not have abrupt awakenings to cynicism or to good faith, but which implies a constant and particular style of life. Our embarrassment then appears extreme since we can neither reject nor comprehend bad faith.

To escape from these difficulties people gladly have recourse to the unconscious. In the psychoanalytic interpretation, for example, they use the hypothesis of a censor, conceived as a line of demarcation with customs, passport division, currency control, *etc.* to re-establish the duality of the deceiver and the deceived. Here instinct or, if you prefer, original drives and complexes of drives constituted by our individual history, make up *reality*. It is neither *true* nor *false* since it does not exist *for itself*. It simply *is*, exactly like this table, which is neither true nor false *in itself* but simply

2. Sartre's own word, meaning subject to sudden changes or transitions. [TRANS.]

real. As for the conscious symbols of the instinct, this interpretation takes them not for appearances but for real psychic facts. Fear, forgetting, dreams exist really by virtue of concrete facts of consciousness, in the same way as the words and the attitudes of the liar are concrete, really existing patterns of behaviour. The subject has the same relation to these phenomena as the deceived to the behaviour of the deceiver. He establishes them in their reality and must interpret them. There is a *truth* in the activities of the deceiver; if the deceived could reattach them to the situation where the deceiver establishes himself and to his project of the lie, they would become integral parts of truth, by virtue of the behaviour of lying. Similarly there is a truth in the symbolic acts; it is what the psychoanalyst discovers when he reattaches them to the historical situation of the patient, to the unconscious complexes which they express, to the blocking of the censor. Thus the subject deceives himself about the *meaning* of his conduct, he apprehends it in its concrete existence but not in its *truth*, for lack of being able to derive it from an original situation and from a psychic constitution which remain alien to him.

By the distinction between the "id" and the "ego," Freud has cut the psychic whole into two. I *am* the ego but I am not the *id*. I hold no privileged position in relation to my unconscious psyche. I *am* my own psychic phenomena, in so far as I establish them in their conscious reality. For example, I am the impulse to steal this or that book from this bookstall. I am an integral part of the impulse; I bring it to light and I determine myself hand in hand with it to commit the theft. But I *am* not those psychic facts, in so far as I receive them passively and am obliged to resort to hypotheses about their origin and their true meaning, just as the scholar makes conjectures about the nature and essence of an external phenomenon. This theft, for example, which I interpret as an immediate impulse determined by the rarity, the interest, or the price of the volume which I am going to steal—it is in truth a process derived from self-punishment which is attached more or less directly to an Oedipus complex. The impulse toward the theft contains a truth which can be reached only by more or less probable hypotheses. The criterion of this truth will be the number of conscious psychic facts which it explains; from a more pragmatic point of view it will be also the success of the psychiatric cure which it allows. Finally the discovery of this truth will necessitate the cooperation of the psychoanalyst, who appears as the *mediator* between my unconscious drives and my conscious life. *The other* appears as being able to effect the synthesis between the unconscious thesis and the conscious antithesis. I can know myself only through the mediation of the other, which means that I stand in relation to *my* "id," in the position of *the other*. If I have a little knowledge of psychoanalysis, I can, under circumstances particularly favorable, try to psychoanalyze myself. But this attempt can succeed only if I distrust every kind of intuition, only if I apply

to my case *from without*, abstract schemes and rules already learned. As for the results, whether they are obtained by my efforts alone or with the co-operation of a technician, they will never have the certainty which intuition confers; they will possess simply the always increasing probability of scientific hypotheses. The hypothesis of the Oedipus complex, like the atomic theory, is nothing but an "experimental idea"; as Peirce said, it is not to be distinguished from the totality of experiences which it allows to be realized and the results which it enables us to foresee. Thus psychoanalysis substitutes for the notion of bad faith, the idea of a lie without a liar; it allows me to understand how it is possible for me to be lied to without lying to myself since it places me in the same relation to myself that the other has in respect to me; it replaces the duality of the deceiver and the deceived, the essential condition of the lie, by that of the "id" and the "ego." It introduces into my subjectivity the deepest intersubjective structure of the *Mit-sein*. Can this explanation satisfy us?

Considered more closely the psychoanalytic theory is not as simple as it first appears. It is not accurate to hold that the "id" is presented as a thing in relation to the hypothesis of the psychoanalyst, for a thing is indifferent to the conjectures which we make concerning it, while the "id" on the contrary is sensitive to them when we approach the truth. Freud in fact reports resistance when at the end of the first period the doctor is approaching the truth. This resistance is objective behaviour apprehended from without: the patient shows defiance, refuses to speak, gives fantastic accounts of his dreams, sometimes even takes himself completely away from the psychoanalytic cure. It is a fair question to ask what part of himself can thus resist. It can not be the "Ego," envisaged as a psychic totality of the facts of consciousness; this could not suspect that the psychiatrist is approaching the end since its relation to the *meaning* of its own reactions is exactly like that of the psychiatrist himself. At the very most it is possible for the ego to appreciate objectively the degree of probability in the hypotheses set forth, as a witness of the psychoanalysis might be able to do, according to the number of subjective facts which they explain. Furthermore, this probability would appear to the ego to border on certainty, which he could not take offence at since most of the time it is he who by a *conscious* decision is in pursuit of the psychoanalytic therapy. Are we to say that the patient is disturbed by the daily revelations which the psychoanalyst makes to him and that he seeks to remove himself, at the same time pretending in his own eyes to wish to continue the cure? In this case it is no longer possible to resort to the unconscious to explain bad faith; it is there in full consciousness, with all its contradictions. But this resistance; for him it is secret and deep, it comes from afar; it has its roots in the very thing which the psychoanalyst is trying to make clear.

Furthermore it is equally impossible to explain the resistance as emanating from the complex which the psychoanalyst wishes to bring to light. The

complex as such is rather the collaborator of the psychoanalyst since it aims at expressing itself in clear consciousness, since it plays tricks on the censor and seeks to elude it. The only level on which we can locate the refusal of the subject is that of the censor. It alone can comprehend the questions or the revelations of the psychoanalyst as approaching more or less near to the real drives which it strives to repress—it alone because it alone *knows* what it is repressing.

If we reject the language and the materialistic mythology of psychoanalysis, we perceive that the censor in order to apply its activity with discernment, must know what it is repressing. In fact if we abandon all the metaphors representing the repression as the impact of blind forces, we are compelled to admit that the censor must choose and in order to choose must be aware of so doing. How could it happen otherwise that the censor allows lawful sexual impulses to pass through, that it permits needs (hunger, thirst, sleep) to be expressed in clear consciousness? And how are we to explain that it can relax its surveillance, that it can even be *deceived* by the disguises of the instinct? But it is not sufficient that it discern the condemned drives; it must also apprehend them as *to be repressed*, which implies in it at the very least an awareness of its activity. In a word, how could the censor discern the impulses needing to be repressed without being conscious of discerning them? How can we conceive of a knowledge which is ignorant of itself? To know is to know that one knows, said Alain. Let us say rather: all knowing is consciousness of knowing. Thus the resistance of the patient implies on the level of the censor an awareness of the thing repressed as such, a comprehension of the end toward which the questions of the psychoanalyst are leading, and an act of synthetic connection by which it compares the *truth* of the repressed complex to the psychoanalytic hypothesis which aims at it. These various operations in their turn imply that the censor is conscious (of) itself. But what type of self-consciousness can the censor have? It must be the consciousness (of) being conscious of the drive to be repressed, but precisely *in order not to be conscious of it*. What does this mean if not that the censor is in bad faith?

Psychoanalysis has not gained anything for us since in order to overcome bad faith, it has established between the unconscious and consciousness an autonomous consciousness in bad faith. The effort to establish a veritable duality and even a trinity (*Es, Ich, Ueberich* expressing themselves through the censor) has resulted in a merely verbal terminology. The very essence of the reflexive idea of hiding something from oneself implies the unity of one and the same psychic mechanism and consequently a double activity in the heart of unity, tending on the one hand to maintain and locate the thing to be concealed and on the other hand to repress and disguise it. Each of the two aspects of this activity is complementary to the other; that is, it implies the other in its being. By separating consciousness from the unconscious by means of the censor, psychoanalysis has not succeeded in dissociating the

two phases of the act, since the libido is a blind conatus toward conscious expression and since the conscious phenomenon is a passive, faked result. Psychoanalysis has merely localized this double activity of repulsion and attraction on the level of the censor.

Furthermore the problem still remains of accounting for the unity of the total phenomenon (the repression of the drive which disguises itself and "passes" in symbolic form), to establish comprehensible connections among its different phases. How can the repressed drive "disguise itself" if it does not include (1) the consciousness of being repressed, (2) the consciousness of having been pushed back because it is what it is, (3) a project of disguise? No mechanistic theory of condensation or of transference can explain these modifications by which the drive itself is affected, for the description of the process of disguise implies a veiled appeal to finality. And similarly how are we to account for the pleasure or the anguish which accompanies the symbolic and conscious satisfaction of the drive if consciousness does not include—beyond the censor—an obscure comprehension of the end to be attained as simultaneously desired and forbidden. By rejecting the conscious unity of the psyche, Freud is obliged to imply everywhere a magic unity linking distant phenomena across obstacles, just as sympathetic magic unites the spellbound person and the wax image fashioned in his likeness. The unconscious drive (*Trieb*) through magic is endowed with the character "repressed" or "condemned," which completely pervades it, colors it, and magically provokes its symbolism. Similarly the conscious phenomenon is entirely colored by its symbolic meaning, although it can not apprehend this meaning by itself in clear consciousness.

Aside from its inferiority in principle, the explanation by magic does not avoid the coexistence—on the level of the unconscious, on that of the censor, and on that of consciousness—of two contradictory, complementary structures which reciprocally imply and destroy each other. Proponents of the theory have hypostasized and "reified" bad faith, they have not escaped it. That is what has inspired a Viennese psychiatrist, Steckel, to depart from the psychoanalytical tradition and to write in *La femme frigide*:³ "Every time that I have been able to carry my investigations far enough, I have established that the crux of the psychosis was conscious." In addition the cases which he reports in his work bear witness to a pathological bad faith, which the Freudian doctrine can not account for. There is the question, for example, of women whom a marital infidelity has made frigid; that is, they succeed in hiding from themselves not complexes deeply sunk in half-physiological darkness, but acts of conduct which are objectively discoverable, which they can not fail to record at the moment when they perform them. Frequently in fact the husband reveals to Steckel that his wife has given objective signs of pleasure, but the woman when questioned will fiercely deny them. Here we find a pattern of detachment. Admissions

3. Nouvelle Revue Française.

which Steckel was able to draw out inform us that these pathologically frigid women apply themselves to detaching themselves in advance from the pleasure which they dread; many for example at the time of the sexual act turn their thoughts away toward their daily occupations, make up their household accounts. Will anyone speak of an unconscious here? Yet if the frigid woman thus detaches her consciousness from the pleasure which she experiences, it is by no means cynically and in full agreement with herself; it is *in order to prove to herself* that she is frigid. We have in fact to deal with a phenomenon of bad faith since the efforts taken in order not to be present to the experienced pleasure imply the recognition that the pleasure is experienced; they imply it *in order to deny it*. But we are no longer on the ground of psychoanalysis. Thus on the one hand the explanation by means of the unconscious, due to the fact that it breaks the psychic unity, can not account for the facts which at first sight it appeared to explain. And on the other hand, there exists an infinity of types of behaviour in bad faith which explicitly reject this kind of explanation because their essence implies that they can appear only in the translucency of consciousness. We find that the problem which we had attempted to resolve is still untouched.

II. PATTERNS OF BAD FAITH

If we wish to get out of this difficulty, we should examine more closely the patterns of bad faith and attempt a description of them. This description will permit us perhaps to fix more exactly the conditions for the possibility of bad faith, that is, to reply to the question we raised at the outset: "What must be the being of man if he is to be capable of bad faith?"

Take the example of a woman who has consented to go out with a particular man for the first time. She knows very well the intentions which the man who is speaking to her cherishes regarding her. She knows also that it will be necessary sooner or later for her to make a decision. But she does not want to realize the urgency; she concerns herself only with what is respectful and discreet in the attitude of her companion. She does not apprehend this conduct as an attempt to achieve what we call "the first approach"; that is, she does not want to see the possibilities of temporal development which his conduct presents. She restricts this behaviour to what is in the present; she does not wish to read in the phrases which he addresses to her anything other than their explicit meaning. If he says to her, "I find you so attractive!" she disarms this phrase of its sexual background; she attaches to the conversation and to the behaviour of the speaker, the immediate meanings, which she imagines as objective qualities. The man who is speaking to her appears to her sincere and respectful as the table is round or square, as the wall coloring is blue or gray. The qualities thus attached to the person she is listening to are in this way fixed in a permanence like that of things, which is no other than the projection of the strict

present of the qualities into the temporal flux. This is because she does not quite know what she wants. She is profoundly aware of the desire which she inspires, but the desire cruel and naked would humiliate and horrify her. Yet she would find no charm in a respect which would be only respect. In order to satisfy her, there must be a feeling which is addressed wholly to her *personality*—that is, to her full freedom—and which would be a recognition of her freedom. But at the same time this feeling must be wholly desire; that is, it must address itself to her body as object. This time then she refuses to apprehend the desire for what it is; she does not even give it a name; she recognizes it only to the extent that it transcends itself toward admiration, esteem, respect and that it is wholly absorbed in the more refined forms which it produces, to the extent of no longer figuring any more as a sort of warmth and density. But then suppose he takes her hand. This act of her companion risks changing the situation by calling for an immediate decision. To leave the hand there is to consent in herself to flirt, to engage herself. To withdraw it is to break the troubled and unstable harmony which gives the hour its charm. The aim is to postpone the moment of decision as long as possible. We know what happens next; the young woman leaves her hand there, but she *does not notice* that she is leaving it. She does not notice because it happens by chance that she is at this moment all intellect. She draws her companion up to the most lofty regions of sentimental speculation; she speaks of life, of her life, she shows herself in her essential aspect—a personality, a consciousness. And during this time the divorce of the body from the soul is accomplished; the hand rests inert between the warm hands of her companion—neither consenting nor resisting—a thing.

We shall say that this woman is in bad faith. But we see immediately that she uses various procedures in order to maintain herself in this bad faith. She has disarmed the actions of her companion by reducing them to being only what they are; that is, to existing in the mode of the in-itself. But she permits herself to enjoy his desire, to the extent that she will apprehend it as not being what it is, will recognize its transcendence. Finally while sensing profoundly the presence of her own body—to the degree of being disturbed perhaps—she realizes herself as *not being* her own body and she contemplates it as though from above, as a passive object to which events can *happen*, but which can neither provoke them nor avoid them because all its possibilities are outside of it. What unity do we find in these various aspects of bad faith? It is a certain art of forming contradictory concepts which unite in themselves both an idea and the negation of that idea. The basic concept which is thus engendered, utilizes the double property of the human being, who is at once a *facticity* and a *transcendence*. These two aspects of human reality are in truth and ought to be capable of a valid coordination. But bad faith does not wish either to coordinate them or to surmount them in a synthesis. Bad faith seeks to affirm their identity while preserving their differences. It must affirm facticity as *being* transcendence and transcendence

as *being* facticity, in such a way that in the instant when a person apprehends the one, he can find himself abruptly faced with the other.

We can find the prototype of formulae of bad faith in certain famous expressions which have been rightly conceived to produce their whole effect in a spirit of bad faith. Take for example the title of a work by Jacques Chardonne, *Love Is Much More than Love*.⁴ We see here how unity is established between *present* love in its facticity—"the contact of two skins," sensuality, egoism, Proust's mechanism of jealousy, Adler's battle of the sexes, etc.—and love as transcendence—Mauriac's "river of fire," the longing for the infinite, Plato's *eros*, Lawrence's deep cosmic intuition, etc. Here we leave facticity to find ourselves suddenly beyond the present and the factual condition of man, beyond the psychological, in the heart of metaphysics. On the other hand, the title of a play by Sarment, *I Am Too Great for Myself*,⁵ which also presents characters in bad faith, throws us first into full transcendence in order suddenly to imprison us within the narrow limits of our factual essence. We will discover this structure again in the famous phrase: "He has become what he was" or in its no less famous opposite: "Eternity at last changes each man into himself."⁶ It is well understood that these various formulae have only the *appearance* of bad faith; they have been conceived in this paradoxical form explicitly to shock the mind and discountenance it by an enigma. But it is precisely this appearance which is of concern to us. What counts here is that the formulae do not constitute new, solidly structured ideas; on the contrary, they are formed so as to remain in perpetual disintegration and so that one may slide at any time from naturalistic present to transcendence and *vice versa*.

We can see the use which bad faith can make of these judgments which all aim at establishing that I am not what I am. If I were not what I *am*, I could, for example, seriously consider an adverse criticism which someone makes of me, question myself scrupulously, and perhaps be compelled to recognize the truth in it. But thanks to transcendence, I am not subject to all that I am. I do not even have to discuss the justice of the reproach. As Suzanne says to Figaro, "To prove that I am right would be to recognize that I can be wrong." I am on a plane where no reproach can touch me, since what I really am is my transcendence. I flee from myself, I escape myself, I leave my tattered garment in the hands of the fault-finder. But the ambiguity necessary for bad faith comes from the fact that I affirm here that I *am* my transcendence in the mode of being of a thing. It is only thus, in fact, that I can feel that I escape all reproaches. It is in the sense that our young woman purifies the desire of anything humiliating, by being willing to consider it only as pure transcendence, which she avoids even naming. But inversely "I am too great for myself" while showing our tran-

4. *L'amour, c'est beaucoup plus que l'amour.*

5. *Je suis trop grand pour moi.*

6. *Il est devenu ce qu'il était. Tel qu'en lui-même enfin l'éternité le change.*

scendence changed into facticity, is the source of an infinity of excuses for our failures or our weaknesses. Similarly the young coquette maintains transcendence to the extent that the respect, the esteem manifested by the actions of her admirer are already on the plane of the transcendent. But she arrests this transcendence, she glues it down with all the facticity of the present; respect is nothing other than respect, it is an arrested surpassing which no longer surpasses itself toward anything.

But although this *metastable* concept of "transcendence-facticity" is one of the most basic instruments of bad faith, it is not the only one of its kind. We can equally well use another kind of duplicity derived from human reality which we will express roughly by saying that its being-for-itself implies complementarily a being-for-others. Upon any one of my activities it is always possible to converge two regards, mine and that of another. The activity will not present exactly the same structure in each case. But as we shall see later, as each regard perceives it, there is not between these two aspects of my being, any difference of appearance in being, as if I were to my self the truth of myself and as if the other possessed only a deformed image of me. The equal dignity of being, possessed by my being-for-another and by my being-for-myself permits a perpetually disintegrating synthesis and a perpetual game of evasion from the for-itself to the for-others and from the for-others to the for-itself. We have seen also the use which our young lady made of our being-in-the-midst-of-the-world; that is, of our inert presence as a passive object among other objects—in order to relieve herself suddenly from the functions of her being-in-the-world; that is, from the being which causes there to exist a world by projecting itself beyond the world toward its own possibilities. Let us note finally the confusing syntheses which play on the annihilating ambiguity of these temporal ek-stases, affirming at once that I am what I have been (the man who deliberately *arrests himself* at one period in his life and refuses to take into consideration the later changes) and that I am not what I have been (the man who in the face of reproaches or rancour dissociates himself from his past by insisting on his freedom and on his perpetual re-creation). In all these concepts, which have only a transitive role in the reasoning and which are eliminated from the conclusion, like hypochondriacs in the calculations of physicians, we find again the same structure. We have to deal with human reality as a being which is what it is not and which is not what it is.

But what exactly is necessary in order for these concepts of disintegration to be able to receive even a pretence of existence, in order for them to be able to appear for an instant to consciousness, even in a process of evanescence? A quick examination of the idea of sincerity, the antithesis of bad faith, will be very instructive in this connection. Actually sincerity presents itself as a demand and consequently is not a *state*. Now what is the ideal to be attained in this case? It is necessary that a man be *for himself* only what he *is*. But is this not precisely the definition of the in-itself—

or if you prefer—the principle of identity? To posit as an ideal the being of things, is this not to assert by the same stroke that this being does not belong to human reality and that the principle of identity, far from being a universal axiom universally applied, is only a synthetic principle enjoying a merely regional universality? Thus in order that the concepts of bad faith can put us under illusion at least for an instant, in order that the candour of “pure hearts” (*cf.* Gide, Kessel) can have validity for human reality as an ideal, the principle of identity must not represent a constitutive principle of human reality and human reality must not be necessarily what it is but must be able to be what it is not. What does this mean?

If man is what he is, bad faith is for ever impossible and candour ceases to be his ideal and becomes instead his being. But is man what he is? And more generally, how can he *be* what he is when he exists as consciousness of being? If candour or sincerity is a universal value, it is evident that the maxim “One must be what one is” does not serve uniquely as a regulating principle for judgements and concepts by which I express what I am. It posits not merely an ideal of knowing but an ideal of *being*; it proposes for us an absolute equivalence of being with itself as a prototype of being. In this sense it is necessary that we *make ourselves* what we are. But what *are we* then if we have the constant obligation to make ourselves what we are, if our mode of being is having the obligation to be what we are?

Let us consider this waiter in the café. His movement is quick and forward, a little too precise, a little too rapid. He comes toward the patrons with a step a little too quick. He bends forward a little too eagerly; his voice, his eyes express an interest a little too solicitous for the order of the customer. Finally there he returns, trying to imitate in his walk the inflexible stiffness of some kind of automaton while carrying his tray with the recklessness of a tightrope-walker by putting it in a perpetually unstable, perpetually broken equilibrium which he perpetually re-establishes by a light movement of the arm and hand. All his behaviour seems to us a game. He applies himself to chaining his movements as if they were mechanisms, the one regulating the other, his gestures and even his voice seem to be mechanisms, he gives himself the quickness and pitiless rapidity of things. He is playing, he is amusing himself. But what is he playing? We need not watch long before we can explain it: he is playing *at being* a waiter in a café. There is nothing there to surprise us. The game is a kind of marking out and investigation. The child plays with his body in order to explore it, to take inventory of it; the waiter in the café plays with his condition in order to *realize* it. This obligation is not different from that which is imposed on all tradesmen. Their condition is wholly one of ceremony. The public demands of them that they realize it as a ceremony; there is the dance of the grocer, of the tailor, of the auctioneer, by which they endeavour to persuade their clientele that they are nothing but a grocer, an auctioneer, a tailor. A grocer who dreams is offensive to the buyer,

because such a grocer is not wholly a grocer. Society demands that he limit himself to his function as a grocer, just as the soldier at attention makes himself into a soldier-thing with a direct regard which does not see at all, which is no longer meant to see, since it is the rule and not the interest of the moment which determines the point he must fix his eyes on (the sight "fixed at ten paces"). There are indeed many precautions to imprison a man in what he is, as if we lived in perpetual fear that he might escape from it, that he might break away and suddenly elude his condition.

In a parallel situation, from within, the waiter in the café can not be immediately a café waiter in the sense that this inkwell *is* an inkwell, or the glass is a glass. It is by no means that he can not form reflective judgments or concepts concerning his condition. He knows well what it "means": the obligation of getting up at five o'clock, of sweeping the floor of the shop before the restaurant opens, of starting the coffeepot going, *etc.* He knows the rights which it allows: the right to the tips, the right to belong to a union, *etc.* But all these concepts, all these judgements refer to the transcendent. It is a matter of abstract possibilities, of rights and duties conferred on a "person possessing rights." And it is precisely this person *who I have to be* (if I am the waiter in question) and who I am not. It is not that I do not wish to be this person or that I want this person to be different. But rather there is no common measure between his being and mine. It is a "representation" for others and for myself, which means that I can be he only in *representation*. But if I represent myself as him, I am not he; I am separated from him as the object from the subject, separated *by nothing*, but this nothing isolates me from him. I can not be he, I can only play *at being* him; that is, to imagine to myself that I am he. And thereby I affect him with nothingness. In vain do I fulfill the functions of a café waiter. I can be he only in the neutralized mode, as the actor is Hamlet, by mechanically making the *typical gestures* of my state and by aiming at myself as an imaginary café waiter through those gestures taken as an "analogue."⁷ What I attempt to realize is a being-in-itself of the café waiter, as if it were not just in my power to confer their value and their urgency upon my duties and the rights of my position, as if it were not my free choice to get up each morning at five o'clock or to remain in bed, even though it meant getting fired. As if from the very fact that I sustain this role in existence I did not transcend it on every side, as if I did not constitute myself as one *beyond* my condition. Yet there is no doubt that I *am* in a sense a café waiter—otherwise could I not just as well call myself a diplomat or a reporter? But if I am one, this can not be in the mode of being in-itself. I am a waiter in the mode *of being what I am not*.

Furthermore we are dealing with more than mere social conditions; I am never any one of my attitudes, any one of my actions. The good speaker

7. Cf. *L'Imaginaire* (Nouvelle Revue Française, 1939) Conclusion.

is the one who *plays* at speaking, because he can not *be speaking*. The attentive pupil who wishes to *be* attentive, his eyes riveted on the teacher, his ears open wide, so exhausts himself in playing the attentive role that he ends up by no longer hearing anything. Perpetually absent to my body, to my acts, I am despite myself that "divine absence" of which Valéry speaks. I can not say either that I *am* here or that I *am* not here, in the sense that we say "that box of matches *is* on the table"; this would be to confuse my "being-in-the-world" with a "being-in-the-midst-of-the-world." Nor that I *am* standing, nor that I *am* seated; this would be to confuse my body with the idiosyncratic totality of which it is only one of the structures. On all sides I escape being and yet—I am.

But takes a mode of being which concerns only myself: I am sad. One might think that surely I am the sadness in the mode of being what I am. What is the sadness, however, if not the intentional unity which comes to reassemble and animate the totality of my conduct? It is the meaning of this dull look with which I view the world, of my bowed shoulders, of my lowered head, of the listlessness in my whole body. But at the very moment when I adopt each of these attitudes, do I not know that I shall not be able to hold on to it? Let a stranger suddenly appear and I will lift up my head. I will assume a lively cheerfulness. What will remain of my sadness except that I obligingly promise it an appointment for later after the departure of the visitor. Moreover is not this sadness itself a *conduct*? Is it not consciousness which affects itself with sadness as a magical recourse against a situation too urgent?⁸ And in this case even, should we not say that being sad means first to make oneself sad? That may be, someone will say, but after all doesn't giving oneself the being of sadness mean to *receive* this being? It makes no difference from where I receive it. The fact is that a consciousness which affects itself with sadness *is* sad precisely for this reason. But it is difficult to comprehend the nature of consciousness; the being-sad is not a ready-made being which I give myself as I can give this book to my friend. I do not possess the property of *affecting myself with being*. If I make myself sad, I must continue to make myself sad from beginning to end. I can not treat my sadness as an impulse finally achieved and put it on file without re-creating it, nor can I carry it in the manner of an inert body which continues its movement after the initial shock; there is no inertia in consciousness. If I make myself sad, it is because I *am* not sad—the being of the sadness escapes me by and in the very act by which I affect myself with it. The being-in-itself of sadness perpetually haunts my consciousness (of) being sad, but it is as a value which I can not realize, it stands as a regulative meaning of my sadness, not as its constitutive modality.

Someone may say that my consciousness at least *is*, whatever may be the object or the state of which it makes itself consciousness. But how do we dis-

8. *Esquisse d'une théorie des émotions*. Herman Paul. English: *The Emotions: Outline of a Theory* (New York, Philosophical Library, 1948).

tinguish my consciousness (of) being sad from sadness? Is it not all one? It is true in a way that my consciousness *is*, if one means by this that for another it is a part of the totality of being on which judgements can be brought to bear. But it should be noted, as Husserl clearly understood, that my consciousness appears originally to the other as an absence. It is the object always present as the *meaning* of all my attitudes and all my conduct—and always absent, for it gives itself to the intuition of another as a perpetual question, still better, as a perpetual freedom. When Pierre looks at me, I know of course that he is looking at me. His eyes, things in the world, are fixed on my body, a thing in the world—that is the objective fact of which I can say: it *is*. But it is also a fact *in the world*. The meaning of this look is not a fact in the world, and this is what makes me uncomfortable. Although I make smiles, promises, threats, nothing can get hold of the approbation, the free judgement which I seek; I know that it is always beyond. I sense it in my very attitude which is no longer like that of the worker toward the things he uses as instruments. My reactions, to the extent that I project myself toward the other, are no longer for myself but are rather mere *presentations*; they await being constituted as graceful or uncouth, sincere or insincere, *etc.* by an apprehension which is always beyond my efforts to provoke, an apprehension which will be provoked by my efforts only if of itself it lends them force, that is, only in so far as it causes itself to be provoked from without, *which is its own mediation with the transcendent*. Thus the objective fact of the being-in-itself of the consciousness of another is posited in order to disappear in negativity and in freedom: consciousness of another *is* as not being; its being-in-itself of “now” and of “here” is not to be.

To be conscious of another means to be conscious of what one is not.

Furthermore the being of my own consciousness does not appear to me as the consciousness of another. It exists because it makes itself, since its being is consciousness of being. But that means that making sustains being; consciousness has to be its own being, it is never sustained by being; it sustains being in the heart of subjectivity, which means once again that it is inhabited by being but that it is not being: *consciousness is not what it is*.

Under these conditions what can be the significance of the ideal of sincerity except an attempt impossible to achieve, of which the very meaning is in contradiction with the structure of my consciousness. To be sincere, we said, is to be what one is. That supposes that I am not originally what I am. But here naturally Kant's “You ought, therefore you can” is implicitly understood. I can *become* sincere; this is what my duty and my effort to achieve sincerity imply. But we definitely establish that the original structure of “not being what one is” renders impossible in advance all movement toward being in itself or “being what one is.” And this impossibility is not hidden from consciousness; on the contrary, it is the very stuff of consciousness; it is the embarrassing constraint which we constantly experience; it is

our very incapacity to recognize ourselves, to constitute ourselves as being what we are. It is this necessity which means that, as soon as we posit ourselves as a certain being by a legitimate judgement, based on inner experience or correctly deduced from *a priori* or empirical premises, by that very position we surpass this being—and that not toward another being but toward emptiness, toward *nothing*. How then can we blame another for not being sincere or rejoice in our own sincerity, since this sincerity appears to us at the same time to be impossible? How can we in conversation, in confession, in introspection, even attempt sincerity since the effort will by its very nature be doomed to failure and since at the very time when we announce it we have a prejudicative comprehension of its futility? In introspection I try to determine exactly what I am, to make up my mind to be my true self without delay—even though it means consequently to put myself searching for ways to change myself. But what does this mean if not that I am constituting myself as a thing? Shall I determine the ensemble of purposes and motivations which have pushed me to do this or that action? But this is already to postulate a causal determinism which constitutes the flow of my states of consciousness as a succession of physical states. Shall I uncover in myself “drives,” even though it be to affirm them in shame? But is this not deliberately to forget that these drives realize themselves with my agreement, that they are not forces of nature but that I lend them their efficacy by a perpetually renewed decision concerning their value? Shall I pass judgment on my character, on my nature? Is this not to veil from myself at that moment what I know only too well, that I thus judge a past to which by definition my present is not subject? The proof of this is that the same man who in sincerity posits that he is what in actuality he was, is indignant against the reproach of another and tries to disarm it by asserting that he can no longer be what he was. We are readily astonished and upset when the penalties of the court affect a man who in his new freedom *is no longer* the guilty person he was. But at the same time we require of this man that he recognize himself as *being* this guilty one. What then is sincerity except precisely a phenomenon of bad faith? Have we not shown indeed that in bad faith human reality is constituted as a being which is what it is not and which is not what it is.

Let us take an example: A homosexual frequently has an intolerable feeling of guilt and his whole existence is determined in relation to this feeling. One will readily foresee that he is in bad faith. In fact it frequently happens that this man, while recognizing his homosexual inclination, while avowing each and every particular misdeed which he has committed, refuses with all his strength to consider himself “*a pederast*.” His case is always “different,” peculiar; there enters into it something of a game, of chance, of bad luck; the mistakes are all in the past; they are explained by a certain conception of the beautiful which women can not satisfy; we should see in them the results of a restless search, rather than the manifestations of a deeply rooted tendency, *etc., etc.* Here is assuredly a man in bad faith who

borders on the comic since, acknowledging all the facts which are imputed to him, he refuses to draw from them the conclusion which they impose. His friend, who is his most severe critic, becomes irritated with this duplicity. The critic asks only one thing—and perhaps then he will show himself indulgent: that the guilty one recognize himself as guilty, that the homosexual declare frankly—whether humbly or boastfully matters little—“*I am a pederast.*” We ask here: Who is in bad faith? The homosexual or the champion of sincerity?

The homosexual recognizes his faults, but he struggles with all his strength against the crushing view that his mistakes constitute for him *a destiny*. He does not wish to let himself be considered as a thing. He has an obscure but strong feeling that a homosexual is not a homosexual as this table is a table or as this red-haired man is red-haired. It seems to him that he has escaped from each mistake as soon as he has posited it and recognized it; he even feels that the psychic duration by itself cleanses him from each misdeed, constitutes for him an undetermined future, causes him to be born anew. Is he wrong? Does he not recognize in himself the peculiar, irreducible character of human reality? His attitude includes then an undeniable comprehension of truth. But at the same time he needs this perpetual rebirth, this constant evasion in order to live; he must constantly put himself beyond reach in order to avoid the terrible judgement of collectivity. Thus he plays on the word *being*. He would be right actually if he understood the phrase, “I am not a pederast” in the sense of “I am not what I am.” That is, if he declared to himself, “To the extent that a pattern of conduct is defined as the conduct of a pederast and to the extent that I have taken on this conduct, I am a pederast. But to the extent that human reality can not be finally defined by patterns of conduct, I am not one.” But instead he slides surreptitiously towards a different connotation of the word “being.” He understands “not being” in the sense of “not being in itself.” He lays claim to “not being a pederast” in the sense in which this table *is not* an inkwell. He is in bad faith.

But the champion of sincerity is not ignorant of the transcendence of human reality and he knows how at need to appeal to it for his own advantage. He makes use of it even and brings it up in the present argument. Does he not wish, first in the name of sincerity, then of freedom, that the homosexual reflect on himself and acknowledge himself as a homosexual? Does he not let the other understand that such a confession will win indulgence for him? What does this mean if not that the man who will acknowledge himself as a homosexual will no longer be *the same* as the homosexual whom he acknowledges being, and that he will escape into the region of freedom and of good will. The critic asks the man then to be what he is in order no longer to be what he is. It is the profound meaning of the saying, “A sin confessed is half pardoned.” He demands of the guilty one that he constitute himself as a thing, precisely in order no longer to treat him as a thing

And this contradiction is constitutive of the demand of sincerity. Who can not see how offensive to the other and how reassuring for me is a statement such as, "He's just a pederast," which removes a disturbing freedom from a trait and which aims at henceforth constituting all the acts of the other as consequences following strictly from his essence. That is actually what the critic is demanding of his victim—that he constitute himself as a thing, that he should entrust his freedom to his friend as a fief, in order that the friend should return it to him subsequently—like a suzerain to his vassal. The champion of sincerity is in bad faith to the degree that in order to reassure himself, he pretends to judge, to the extent that he demands that freedom as freedom constitute itself as a thing. We have here only one episode in that battle to the death of consciousness which Hegel calls "the relation of the master and the slave." A person appeals to another and demands that in the name of his nature as consciousness he should radically destroy himself as consciousness, but while making this appeal he leads the other to hope for a rebirth beyond this destruction.

Very well, someone will say, but our man is abusing sincerity, playing one side against the other. We should not look for sincerity in the relations of the *Mit-sein* but rather where it is pure—in the relations of a person with himself. But who can not see that objective sincerity is constituted in the same way? Who can not see that the sincere man constitutes himself as a thing in order to escape the condition of a thing by the same act of sincerity? The man who confesses that he is evil has exchanged his disturbing "freedom-for-evil" for an inanimate character of evil; he *is* evil, he clings to himself, he is what he is. But by the same stroke, he escapes from that *thing*, since it is he who contemplates it, since it depends on him to maintain it under his glance or to let it collapse in an infinity of particular acts. He derives a *merit* from his sincerity, and the deserving man is not the evil man as he is evil but as he is beyond his evilness. At the same time the evil is disarmed since it is nothing, save on the plane of determinism, and since in confessing it, I posit my freedom in respect to it; my future is virgin; everything is allowed to me. Thus the essential structure of sincerity does not differ from that of bad faith since the sincere man constitutes himself as what he is *in order not to be it*. This explains the truth recognized by all, that one can fall into bad faith through being sincere. As Valéry pointed out, this is the case with Stendhal. Total, constant sincerity as a constant effort to adhere to oneself is by nature a constant effort to dissociate oneself from oneself. A person frees himself from himself by the very act by which he makes himself an object for himself. To draw up a perpetual inventory of what one is means constantly to redeny oneself and to take refuge in a sphere where one is no longer anything but a pure, free regard. The goal of bad faith, as we said, is to put oneself out of reach, it is an escape. Now we see that we must use the same terms to define sincerity. What does this mean?

In the final analysis the goal of sincerity and the goal of bad faith are not so different. To be sure, there is a sincerity which bears on the past and which does not concern us here; I am sincere if I confess *having had* this pleasure or that intention. We shall see that if this sincerity is possible, it is because in his lapse in the past, the being of man is constituted as a being-in-itself. But here our concern is only with the sincerity which aims at itself in present immanence. What is its goal? To bring me to confess to myself what I am in order that I may finally coincide with my being; in a word, to cause myself to be in the mode of the in-itself, what I am in the mode of "not being what I am." Its assumption is that fundamentally I am already in the mode of the in-itself, what I have to be. Thus we find at the base of sincerity a continual game of mirror and reflection, a perpetual passage from the being which is what it is, to the being which is not what it is and inversely from the being which is not what it is to the being which is what it is. And what is the goal of bad faith? To cause me to be what I am, in the mode of "not being what one is," or not to be what I am in the mode of "being what one is." We find here the same playing with mirrors. In fact in order for me to have an intention of sincerity, I must at the outset simultaneously be and not be what I am. Sincerity does not assign to me a mode of being or a particular quality but in relation to that quality it aims at making me pass from one mode of being to another mode of being. This second mode of being, the ideal of sincerity, I am prevented by nature from attaining, and at the very moment when I struggle to attain it, I have a vague prejudicative comprehension that I shall not attain it. But all the same, in order for me to be able to conceive an intention in bad faith, I must have such a nature that within my being I escape from my being. If I were sad or cowardly in the way in which this inkwell is an inkwell, the possibility of self-deception could not even be conceived. Not only should I be unable to escape from my being; I could not even imagine that I could escape from it. But if bad faith is possible by virtue of a simple project, it is because so far as my being is concerned, there is no difference between being and non-being if I am cut off from my project.

Bad faith is possible only because sincerity is conscious of missing its goal inevitably, due to its very nature. I can try to apprehend myself as "*not being cowardly*," when I *am* so, only on condition that the "being cowardly" is itself "in question" at the very moment when it exists, on condition that it is itself *one* question, that at the very moment when I wish to apprehend it, it escapes me on all sides and annihilates itself. The condition under which I can attempt an effort in bad faith, is that in one sense, I *am not* this coward which I do not wish to be. But if I *were not* cowardly in the simple mode of not-being-what-one-is-not, I would be "in good faith," by declaring that I am not cowardly. Thus this inapprehensible coward is evanescent; in order for me to be cowardly, I must in some way also be cowardly. That does not mean that I must be "a little" cowardly, in the

sense that "a little" signifies "to a certain degree cowardly—and not cowardly to a certain degree." No. I must at once both be and not be totally and in all aspects a coward. Thus in this case bad faith requires that I should not be what I am; that is, that there be an imponderable difference separating being from non-being in the mode of being of human reality. But self-deception is not restricted to denying the qualities which I possess, to not seeing the being which I am. It attempts also to constitute myself as being what I am not. It apprehends me positively as courageous when I am not so. And that is possible, once again, only if I am what I am not; that is, if non-being in me does not have being even by virtue of non-being. Of course necessarily I *am not* courageous; otherwise bad faith would not be bad faith. But in addition my effort in bad faith must include the ontological comprehension that even in my usual being what I *am*. I am not it really and that there is no such difference between the being of "being-sad," for example—which I *am* in the mode of not being what I am—and the "non-being" of not-being-courageous which I wish to hide from myself. Moreover it is particularly requisite that the very negation of being should be itself the object of a perpetual annihilation, that the very meaning of "non-being" be perpetually in question in human reality. If I *were not* courageous in the way in which this inkwell is not a table; that is, if I were isolated in my cowardice, propped firmly against it, incapable of putting it in relation to its opposite, if I were not capable of *determining* myself as cowardly—that is, to deny courage to myself and thereby to escape my cowardice in the very moment that I posit it—if it were not on principle *impossible* for me to coincide with my *not-being-courageous* as well as with my being-courageous—then any project of bad faith would be prohibited me. Thus in order for bad faith to be possible, sincerity itself must be in bad faith. The condition of the possibility for bad faith is that human reality, in its most immediate being, in the inner structure of the prereflective *cogito*, must be what it is not and not be what it is.

III. THE "FAITH" OF BAD FAITH

We have indicated for the moment only those conditions which render bad faith conceivable, the structures of being which permit us to form concepts of bad faith. We can not restrict ourselves to these considerations; we have not yet distinguished bad faith from falsehood. The two-faced concepts which we have described would without a doubt be utilized by a liar to discountenance his questioner, although their two-faced quality being established on the being of man and not on some empirical circumstance, can and ought to be evident to all. The true problem of bad faith stems evidently from the fact that bad faith is *faith*. It can not be either a cynical lie or certainty—if certainty is the intuitive possession of the object. But if

we take belief as meaning the adherence of being to its object when the object is not given or is given indistinctly, then bad faith is belief; and the essential problem of bad faith is a problem of belief. How can we believe by bad faith in the concepts which we forge expressly to persuade ourselves? We must note in fact that the project of bad faith must be itself in bad faith. I am not only in bad faith at the end of my effort, when I have constructed my two-faced concepts and when I have persuaded myself. In truth, I have not persuaded myself; to the extent that I could be so persuaded, I have always been so. And at the very moment when I was disposed to put myself in bad faith, I of necessity was in bad faith with respect to this same disposition. For me to have represented it to myself as bad faith would have been cynicism; to believe it sincerely innocent would have been in good faith. The decision to be in bad faith does not dare to speak its name; it believes itself and does not believe itself in bad faith; it believes itself and does not believe itself in good faith. It is this which from the upsurge of bad faith, determines the later attitude and as it were, the *Weltanschauung* of bad faith.

Bad faith does not hold the norms and criteria of truth as they are accepted by the critical thought of good faith. What it decides first, in fact, is the nature of truth. With bad faith a truth appears, a method of thinking, a type of being which is like that of objects; the ontological characteristic of the world of bad faith, with which the subject suddenly surrounds himself, is that here being is what it is not, and is not what it is. Consequently a peculiar type of evidence appears; *non-persuasive* evidence. Bad faith apprehends evidence but it is resigned in advance to not being fulfilled by this evidence, to not being persuaded and transformed into good faith. It makes itself humble and modest; it is not ignorant, it says, that faith is decision and that after each intuition, it must decide and *will what it is*. Thus bad faith in its primitive project and in its coming into the world decides on the exact nature of its requirements. It stands forth in the firm resolution *not to demand too much*, to count itself satisfied when it is barely persuaded, to force itself in decisions to adhere to uncertain truths. This original project of bad faith is a decision in bad faith on the nature of faith. Let us understand clearly that there is no question of a reflective, voluntary decision, but of a spontaneous determination of our being. One *puts oneself* in self-deception as one goes to sleep, and one is in bad faith as one dreams. Once this mode of being has been realized, it is as difficult to get out of it as to wake oneself up; bad faith is a type of being in the world, like waking or dreaming, which by itself tends to perpetuate itself, although its structure is of the *metastable* type. But bad faith is conscious of its structure, and it has taken precautions by deciding that the metastable structure is the structure of being and that non-persuasion is the structure of all convictions. It follows that if bad faith is faith and if it includes in its original project its own negation (it determines itself to be not quite convinced in order to convince

itself that I am what I am not), then to start with, a faith which wishes itself to be not quite convinced must be possible. What are the conditions for the possibility of such a faith?

I believe that my friend Pierre feels friendship for me. I believe it *in good faith*. I believe it but I do not have for it any self-evident intuition, for the nature of the object does not lend itself to intuition. I *believe it*; that is, I allow myself to give in to all impulses to trust it; I decide to believe in it, and to maintain myself in this decision; I conduct myself, finally, as if I were certain of it, the whole in the synthetic unity of one and the same attitude. This which I define as good faith is what Hegel would call *the immediate*. It is simple faith. Hegel would demonstrate at once that the immediate calls for mediation and that belief by becoming *belief for itself*, passes to the state of nonbelief. If I *believe* that my friend Pierre likes me, that means that his friendship appears to me as the meaning of all his acts. Belief is a particular consciousness *of the meaning* of Pierre's acts. But if I know that I believe, the belief appears to me as pure subjective determination without external correlative. This is what makes the very word "to believe" a term utilized indifferently to indicate the unwavering firmness of belief ("My God, I believe in you") and its character as disarmed and strictly subjective. ("Is Pierre my friend? I do not know; I believe so.") But the nature of consciousness is such that in it the mediate and the immediate are one and the same being. To believe is to know that one believes and to know that one believes is no longer to believe. Thus to believe is not to believe any longer because that is only to believe—this in the unity of one and the same non-thetic consciousness (of) self. To be sure, we have here forced the description of the phenomenon by designating it with the word *to know*; non-thetic consciousness is not to *know*. But it is in its very translucency at the origin of all knowing. Thus the non-thetic consciousness (of) believing is destructive of belief. But at the same time the very law of the prereflective *cogito* implies that the being of believing ought to be the consciousness of believing.

Thus belief is a being which questions its own being, which can realize itself only in its destruction, which can manifest itself to itself only by denying itself. It is a being for which to be is to appear and to appear is to deny itself. To believe is not to believe. We see the reason for it; the being of consciousness is to exist by itself, then to make itself be and thereby to pass beyond itself. In this sense consciousness is perpetually escaping itself, belief becomes non-belief, the immediate becomes mediation, the absolute becomes relative, and the relative becomes absolute. The ideal of good faith (to believe what one believes) is, like that of sincerity (to be what one is), an ideal of being-in-itself. Every belief is a belief that falls short; one never wholly believes what one believes. Consequently the primitive project of bad faith is only the utilization of this self-destruction through the fact of

consciousness. If every belief in good faith is an impossible belief, then there is a place for every impossible belief. My inability to *believe* that I am courageous will not discourage me since every belief involves not quite believing. I shall define this impossible belief as *my* belief. To be sure, I shall not be able to hide from myself that I believe in order not to believe and that I do not believe *in order to* believe. But the subtle, total annihilation of bad faith by itself can not surprise me; it exists at the basis of all faith. What is it then? At the moment when I wish to believe myself courageous I *know* that I am a coward. And this certainly would come to destroy my belief. But *first*, I *am* not any more courageous than cowardly, if we are to understand this in the mode of being of the in-itself. In the second place, I do not *know* that I am courageous; such a view of myself can be accompanied only by *belief*, for it surpasses pure reflective certitude. In the third place, it is very true that bad faith does not succeed in believing what it wishes to believe. But it is precisely as the acceptance of not believing what it believes that it is bad faith. Good faith wishes to flee the "not-believing-what-one-believes" by finding refuge in being. Bad faith flees being by taking refuge in "not-believing-what-one-believes." It has disarmed all beliefs in advance—those which it would like to take hold of and, by the same stroke, the others, those which it wishes to flee. In *willing* this self-destruction of belief, from which science escapes by searching for evidence, it ruins the beliefs which are opposed to it, which reveal themselves as *being only belief*. Thus we can better understand the original phenomenon of bad faith.

In bad faith there is no cynical lie, nor knowing preparation for deceitful concepts. But the first act of bad faith is to flee what it can not flee, to flee what it is. The very project of flight reveals to bad faith an inner disintegration in the heart of being, and it is this disintegration which it wishes to be. In truth, the two immediate attitudes which we can take in the face of our being are conditioned by the very nature of this being and its immediate relation with the in-itself. Good faith seeks to flee the inner disintegration of my being in the direction of the in-itself which it should be and is not. Bad faith seeks to flee the in-itself by means of the inner disintegration of my being. But it denies this very disintegration as it denies that it is itself bad faith. Bad faith seeks by means of "not-being-what-one-is" to escape from the in-itself which I am not in the mode of being what one is not. It denies itself as bad faith and aims at the in-itself which I am not in the mode of "not-being-what-one-is-not."⁹ If bad faith is possible, it is because it is an immediate, permanent threat to every project of the human being; it is because consciousness conceals in its being a permanent risk of bad faith.

9. If it is indifferent whether one is in good faith or bad faith because bad faith reapprehends good faith and slides to the very origin of the project of good faith, that does not mean that we can not radically escape bad faith. But that suppose a self-recovery of being which was previously corrupted. This self-recovery we shall call authenticity, the description of which has no place here.

The origin of this risk is that the nature of consciousness simultaneously is to be what it is not and not to be what it is. In the light of these remarks we can now approach the ontological study of consciousness, not as the totality of the human being, but as the instantaneous nucleus of this being.

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Abbreviations: biog.: biographical sketch; disc.: discussion of works; fn: footnote; sel.: selection from works (absence of notation means *passim* reference)

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